REMEDIAL ACTION QUARTERLY MONITORING REPORT

FOURTH QUARTER – 2003 (2 of 120)

SKINNER LANDFILL SITE BUTLER COUNTY WEST CHESTER, OHIO

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LIST OF ACRONYMS

LIST OF ACRONYMS

AMP	Air Monitoring Plan
AOC	Administrative Order on Consent
ARAR	Applicable or Relevant and Appropriate Requirements
BMR	Baseline Monitor Report
BCDES	Butler County Department of Environmental Services
bgs	Below Ground Surface
BZ	Breathing Zone
CD&D	Construction Debris and Demolition Waste
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CGI	Combustible Gas Indicator
CHSD	Corporate Health and Safety Director
CIP	Construction Implementation Plan
CLP	Contract Laboratory Program
cm/sec	Centimeters Per Second
CO	Carbon Monoxide
CP	Contingency Plan
CQA	Construction Quality Assurance
CQAC	Construction Quality Assurance Consultant
CRZ	Contamination Reduction Zone
CRQL	Contract Required Quantitation Limit
CSDI	Contaminated Soils Design Investigation
CY	Cubic Yard
CZ	Control Zone
DSW	Division of Surface Water (OEPA)
DSR	Division Safety Representative
EPA	Environmental Protection Agency
EZ	Exclusion Zone
FID	Flame Ionization Detector
FML	Flexible Membrane Liner (low density polyethylene)
FSP	Field Sampling Plan
FTB	Film Tearing Bond
ft	Feet
ft/sec	Feet Per Second
GCL	Geosynthetic Clay Layer
GCAL	Gulf Coast Analytical Laboratories Inc.
GIS	Groundwater Interceptor System
gpd	Gallons Per Day
gpm	Gallons Per Minute
GWDI	Groundwater Design Investigation
HAP	Hazardous Air Pollutant
HASP	Health and Safety Plan
HDPE	High-Density Polyethylene
HSM	Health and Safety Manager
IDLH	Immediately Dangerous to Life or Health

IRM	Interim Remedial Measures
kg/d	Kilograms Per Day
lb/day	Pounds Per Day
LEL	Lower Explosion Limit
LF	Lineal Feet
LLDPE	Linear Low-Density Polyethylene
µ	Micron
µg/l	Microgram per Liter
MSL	Mean Sea Level
NIOSH	National Institute for Occupational Safety and Health
NO_x	Oxides of Nitrogen
NWI	National Wetland Inventory
O_3	Ozone
OAC	Ohio Administrative Code
ODNR	Ohio Department of Natural Resources
OEPA	Ohio Environmental Protection Agency
ORC	Ohio Revised Code
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PID	Photoionization Detector
PLC	Programmable Logic Controller
PM-10	Particulate Matter less than 10 microns
PRP	Potentially Responsible Party
PPE	Personal Protective Equipment
psi	Pounds Per Square Inch
PQL	Practical Quantitation Limit
QAPP	Quality Assurance Project Plan
QA	Quality Assurance
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RA	Remedial Action
RD	Remedial Design
RHSS	Regional Health & Safety Specialist
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager (USEPA)
RPO	Resident Project Observer
SI	Site Inspection
SF	Square Feet
SLWG	Skinner Landfill Work Group
SO_2	Sulfur Dioxide
SOP	Standard Operating Procedure
SOW	Statement of Work
SPCC	Spill Prevention Control and Counter Measure Plan
SSO	Site Safety Officer
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compound
SZ	Support Zone

TAL	Target Analyte List
TCL	Target Compound List
TDH	Total Dynamic Head
TLV	Threshold Limit Values
TSS	Total Suspended Solids
TWA	Time Weighted Average
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Services
USGS	United States Geological Survey
VOC	Volatile Organic Compound
yr	Year
WBGT	Wet Bulb Globe Temperature
WZ	Work Zone

1.0 INTRODUCTION

1.1 GENERAL INFORMATION

This quarterly monitoring report was prepared for the Skinner Landfill Superfund Site located in West Chester, Butler County, Ohio in accordance with the Operation and Maintenance - Long-Term Performance Plan (O&M-LTP Plan) dated August 2003. The O&M-LTP Plan was prepared to meet the requirements of the Record of Decision (ROD) dated June 4, 1993, the Statement of Work (SOW) dated April 6, 1994, the 100% Final Remedial Design dated June 21, 1996 and the Consent Decree dated April 7, 2001.

The remedial action (RA) post-construction O&M monitoring period began with the third quarter of 2003 and extends for a period of 30 years. This report documents the results of groundwater and surface water monitoring conducted during the fourth quarter of 2003, which is the 2nd of 120 sampling events to be conducted during the 30-year monitoring period.

1.2 SITE LOCATION AND DESCRIPTION

Skinner Landfill is located approximately 15 miles north of Cincinnati, Ohio near West Chester, Butler County, Ohio in Township 3, Section 22, Range 2. The site is located along Cincinnati-Dayton Road, as shown in Figure 1. The site is bordered on the south by the East Fork of Mill Creek, on the north by wooded land, on the east by a Norfolk Southern Railway Company right-of-way, and on the west by a gravel driveway.

The site is located in a highly dissected area that slopes from a till-mantled-bedrock upland to a broad, flat-bottomed valley that is occupied by the main branch of Mill Creek. Elevations on the site range from a high of nearly 800 feet above mean sea level (MSL) in the northeast, to a low of 645 feet above MSL near the confluence of Skinner Creek and East Fork of Mill Creek. Both Skinner Creek and the East Fork of Mill Creek are small, intermittent shallow streams. Both of these streams flow to the southwest from the site toward the main branch of Mill Creek.

In general, the site is underlain by relatively thin glacial drift over inter-bedded shale and limestone of Ordovician age. The composition of the glacial drift ranges from intermixed silt, sand and gravel, to silty sandy clays with a thickness ranging from zero to over forty feet. The sand and gravel deposits comprise the hills and ridges and are encountered near the surface of the central portion of the site. The silts and clays usually occur as lenses in the sands and gravel or directly overlie bedrock.

1.3 SITE HISTORY AND BACKGROUND

The property was originally developed as a sand and gravel mining operation and was subsequently used as a landfill from 1934 to 1990. According to USEPA studies, materials deposited at the site include demolition debris, household refuse and a wide variety of chemical wastes. The waste disposal areas include a now buried former waste lagoon near the center of the site and a landfill. According to USEPA studies, the buried lagoon was used for the disposal of paint wastes, ink wastes, creosote, pesticides, and other chemical wastes. The landfill area, located north and northeast of the buried lagoon, received predominantly demolition and landscaping debris.

In 1976, the Ohio EPA (OEPA) initiated an investigation of the site. In 1982, the site was placed on the National Priority List by the USEPA based on information obtained during a limited investigation of the

site. A Phase II Remedial Investigation was conducted from 1989 to 1991 and involved further investigation of groundwater, surface water, soils and sediments. Both a Baseline Risk Assessment and Feasibility Study (FS) were completed in 1992.

The Phase II Remedial Investigation revealed that the most contaminated media at the site is the soil in the buried waste lagoon. Migration of the landfill constituents has been limited, and the Phase II Remedial Investigation concluded that there had been no off-site migration of landfill constituents via groundwater flow.

In the Record of Decision (ROD), dated June 4, 1993, the USEPA selected a remedy for the site consisting of multi-media capping of the landfill and the buried waste lagoon, and collection and treatment of the groundwater. The ROD also required an investigation to determine the feasibility for soil vapor extraction (SVE) in the granular soil adjacent to the buried lagoon.

The Remedial Design (RD) Investigation performed in 1994 was implemented to collect data required to assess the feasibility of the SVE and to design the multi-media cap and the groundwater extraction/treatment systems. The Remedial Design was submitted to USEPA on June 21, 1996 outlining the cover design and groundwater interception system design. Based on the RD investigation, the installation of an SVE system was determined to be unfeasible.

Construction of a groundwater interception system (GIS) and engineered landfill cover system began in April 2001 and was substantially completed in September 2001. The USEPA conducted the pre-final construction inspection on September 27, 2001, the final construction inspection on March 27, 2003 and the second 5-Year Review on January 22, 2004.

2.0 SAMPLING METHODS

This quarterly monitoring event was conducted in general accordance with the following documents shown with the date of the USEPA-approved final version:

- Operation and Maintenance - Long-Term Performance Plan (O&M-LTP Plan) dated August 2003, and
- RA Health and Safety Plan, Final February 2001.

There were no deviations from these work plans.

3.0 RESULTS

3.1 GROUNDWATER LEVELS

The groundwater elevation data obtained from the monitor wells, piezometers and selected gas probes is presented on Table 1 with the corresponding potentiometric surface map provided in Appendix A. The groundwater flow direction and gradient remained relatively unchanged when compared to the previous quarterly monitoring report period. Groundwater flow direction is to the south-southeast directly toward the East Fork of Mill Creek with an average hydraulic gradient of 0.11 ft/ft. The groundwater gradient has remained relatively unchanged when compared to the average hydraulic gradient of 0.13 ft/ft documented in the Remedial Action Baseline Monitoring Report dated March 2005.

3.2 GROUNDWATER-WASTE MONITORING

Results of the piezometer groundwater levels used to monitor the groundwater levels relative to bottom of waste are provided on Table 2. Based on measured water levels, groundwater has been lowered below the waste elevation during this monitor event at piezometers P-11 and P-12, which are the two piezometers furthest from Duck Pond. The groundwater level remains above the bottom of waste at piezometer P-10. P-9 could not be measured due to an obstruction or possible pinching of the well material.

3.3 GROUNDWATER ANALYTICAL RESULTS

A summary of target compound list (TCL) and target analyte list (TAL) parameter concentrations encountered above the contract required detection limit and revised modified trigger level is provided on Table 3. A summary of the laboratory analytical results have been presented on a per well basis in Appendix B to assist in identifying temporal detection patterns. A report of each data set reduction, validation and assessment procedure conducted on an analytical-set basis in accordance with the O&M-LTP Plan quality assurance project plan (QAPP) is included in Appendix C.

In general, target compound list volatiles, semi-volatiles, pesticides and PCBs were not detected in groundwater above the CRQL.

Three of the 16 TAL parameters, with revised modified trigger levels, were detected above the CRQL. Detections of iron (present in seven groundwater monitoring wells), barium (present in four groundwater monitoring wells) and zinc (present in one groundwater monitoring well) were detected above the CRQL, but below the revised modified trigger levels.

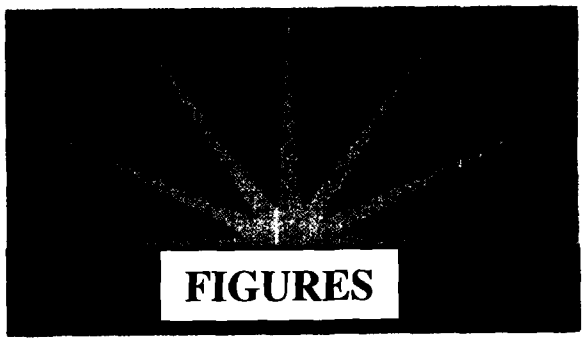
3.4 SURFACE WATER ANALYTICAL RESULTS

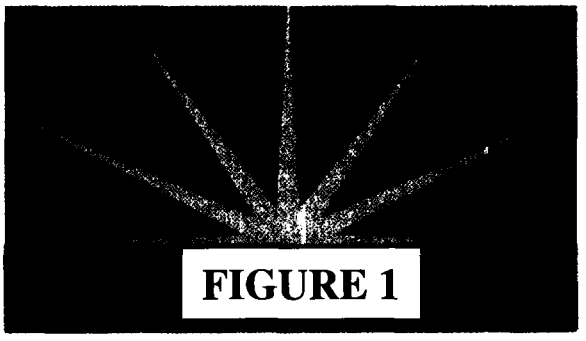
Surface water analyzed consisted of sampling surface runoff from the site and surface water directly from the East Fork of Mill Creek. A summary of TCL and TAL parameter concentrations encountered above the contract required detection limit and revised modified trigger level is provided on Table 4. A summary of surface water laboratory analytical results is presented in Appendix B. The summary tables are presented on a sample location basis. The validated laboratory analytical data is provided in Appendix C.

In general, target compound list volatiles, semi-volatiles, pesticides and PCBs were not detected in surface water above the CRQL.

One of the 16 TAL parameters, with a revised modified trigger level, was detected above the CRQL. One surface-water runoff sample location contained a zinc concentration that exceeded the CRQL, as well as the associated revised modified trigger level.

Zinc has not previously been detected above the CRQL at the surface water run-off sample location; however, future sampling data will be evaluated for reoccurring trends.


FIGURES



SITE VICINITY MAP

FIGURE 1

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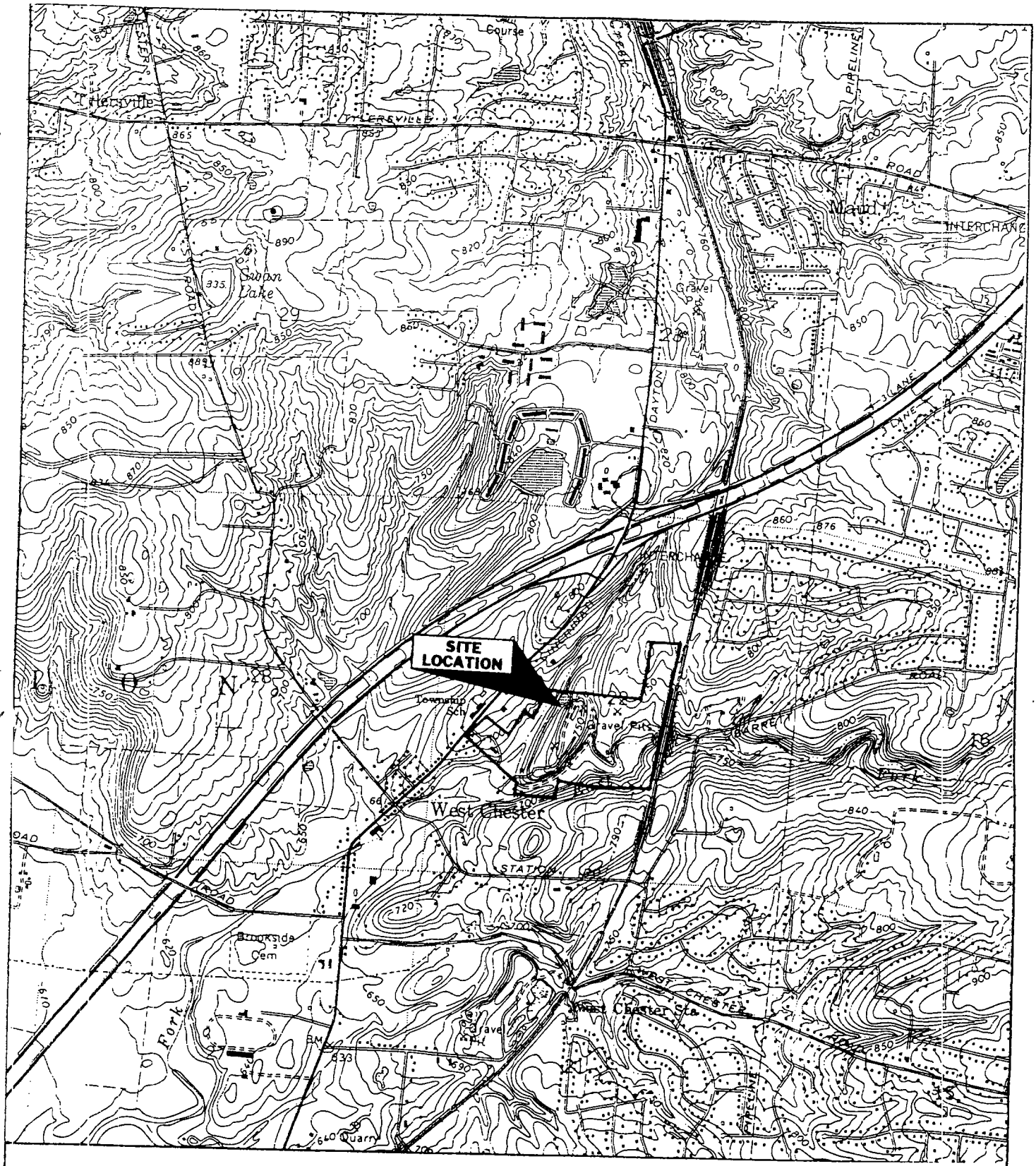
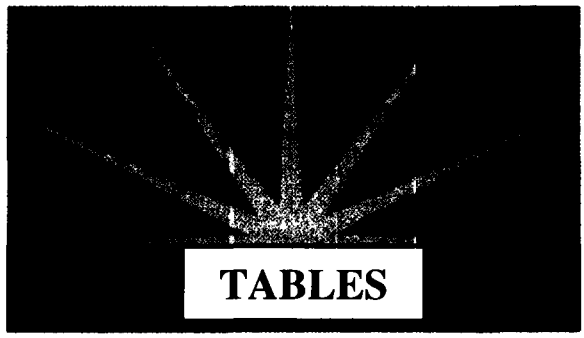
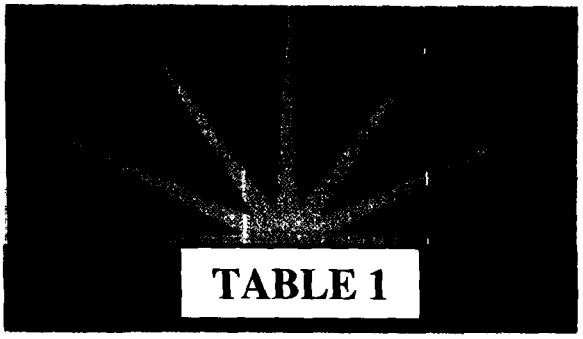

SITE LOCATION
West Chester
Swan Lake
Brookside Cem
Gravel Pit
Quarry
Base taken from USGS Glendale, Ohio
7.5' Topographic Quadrangle, photorevised 1987
0
2000
FEET
EARTH TECH
N
SKINNER LANDFILL
SITE VICINITY MAP
BUTLER COUNTY, OHIO


TABLES



GROUNDWATER ELEVATIONS

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TABLE 1

Groundwater Elevation Summary

Skinner Landfill
West Chester, Ohio

Well Type	Location	Well Use	Ground Surface Elevation (MSL-feet)	Top of Casing Elevation (MSL-feet)	November 2003	
					Depth to Water (feet from top of casing)	Groundwater Elevation (MSL-feet)
Piezometers	P-1	G	685.42	687.65	10.88	676.77
	P-2	G	688.54	690.42	13.11	677.31
	P-3R	G	691.83	693.69	24.95	668.74
	P-4	G	700.32	702.63	8.05	694.58
	P-5	G	708.20	710.65	15.03	695.62
	P-6	G	707.45	710.59	13.03	697.56
	P-7	G	719.08	721.83	Dry	Dry
	P-8	G	747.70	749.91	29.93	719.98
	P-9	G	760.68	763.90	—	—
	P-10	G	761.34	764.16	25.00	739.16
	P-11	G	760.34	762.76	27.93	734.83
	P-12	G	743.50	746.17	40.78	705.39
Groundwater Monitoring Wells	GW-06R	S	683.89	685.91	10.74	675.17
	GW-07R	S	683.46	683.06	6.40	676.66
	GW-24	S	693.32	695.21	17.78	677.43
	GW-26	S	696.61	698.28	29.84	668.44
	GW-30	S	675.63	677.62	9.88	667.74
	GW-58	S	684.03	686.53	13.59	672.94
	GW-59	S	684.35	687.38	7.10	680.28
	GW-60	S	689.12	692.38	12.96	679.42
	GW-61	S	687.38	690.86	12.91	677.95
	GW-62A	S	690.19	692.38	28.80	663.58
	GW-62B	S	690.57	693.13	Dry	Dry
	GW-63	S	698.87	702.50	11.15	691.35
	GW-64	S	700.45	703.88	13.68	690.20
	GW-65	S	703.83	706.88	16.89	689.99
	GW-66	G	686.82	689.41	7.88	681.53
Gas Probes	GP-6	G	772.18	774.65	17.03	757.62
	GP-7	G	749.83	752.65	Dry	Dry

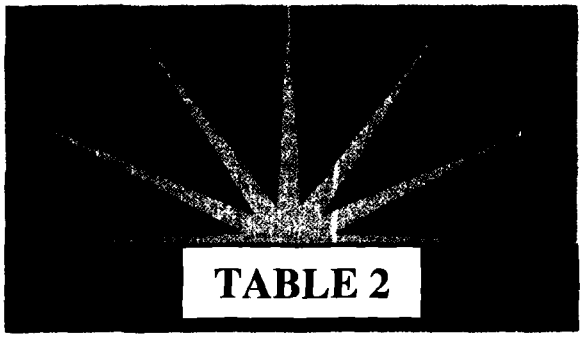
Notes:

MSL - Mean Sea Level

G - Gauging

S - Sampling and Gauging

— No Gauging Data Available (well constricted)



GROUNDWATER/WASTE ELEVATIONS

TABLE 2

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TABLE 2

Groundwater-Waste Monitoring Summary

Skinner Landfill
West Chester, Ohio

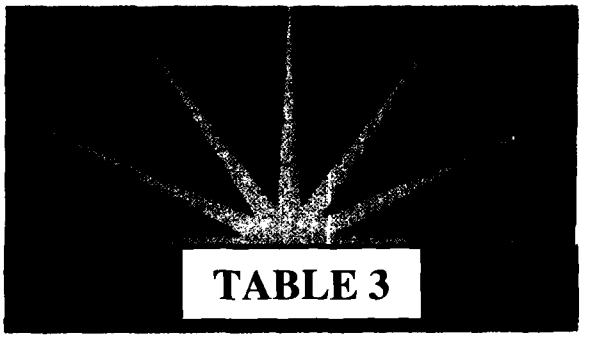
Piezometer	Depth to Waste (feet)	Bottom of Waste Elevation (MSL-feet)	Baseline Water Elevation (June 2001) (feet)	Water Elevation (February 2003) (feet)	Water Elevation (May 2003) (feet)	Water Elevation (August 2003) (feet)	Water Elevation (November 2003) (feet)
P-9	25	737	**745.00**	744.66	744.75	—	—
P-10	30	734	**744.50**	743.66	744.71	738.46	739.16
P-11	17	745	**744.30**	733.12	734.82	735.74	734.83
P-12	35	707	**713.50**	705.84	705.83	705.42	705.39

Notes:

Waste elevations determined during piezometer installation on June 28 and 29, 2001.

Shaded cells indicate water level elevations below the elevation of waste.

— No Gauging Data Available (well constricted)



GROUNDWATER RESULTS SUMMARY

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Table 3

Groundwater Summary

Skinner Landfill
West Chester, Ohio
Fourth Quarter 2003

Sample ID	VOCs	SVOCs	Dissolved Metals**	Pesticides/PCBs
GW-06R	-	-	*barium*	-
GW-07R	-	-	*iron, zinc*	-
GW-24	-	-	*iron*	-
GW-26	-	-	*barium, iron*	-
GW-30	-	-	*barium, iron*	-
GW-58	-	-	*barium, iron*	-
GW-59	-	-	-	-
GW-60	-	-	-	-
GW-61	-	-	*iron*	-
GW-62A	-	-	-	-
GW-62B	*	*	*	*
GW-63	-	-	*iron*	-
GW-64	-	-	-	-
GW-65	-	*	*	*

- all parameters below report limits
italic - above Contract Required Quantitation Levels (CRQL's)
bold - above trigger level
* - Insufficient sample volume.
** - Dissolved metals for analytes that have a corresponding trigger level.

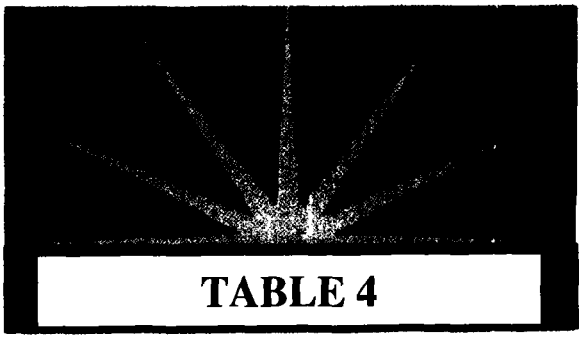


TABLE 4

SURFACE WATER RESULTS SUMMARY

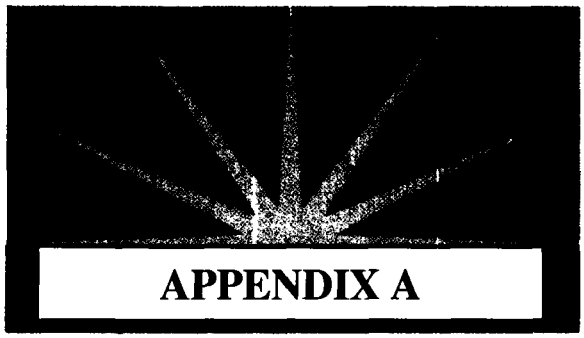
Table 4

Surface Water Summary

Skinner Landfill
West Chester, Ohio
Fourth Quarter 2003

Sample ID	VOCs	SVOCs	Dissolved Metals**	Pesticides/PCBs
SW-50	-	-	-	-
SW-51	-	-	-	-
SW-52	-	-	-	-
SWD-1	*	*	*	*
SWD-2	*	*	*	*
SWD-3	-	-	**zinc**	-

- all parameters below report limits
italic - above Contract Required Quantitation Levels (CRQL's)
bold - above trigger level
* - Insufficient sample volume.
** - Dissolved metals for analytes that have a corresponding trigger level.



APPENDIX A

POTENTIONMETRIC SURFACE MAP

SDMS US EPA Region V

Imagery Insert Form

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APPENDIX A – POTENTIOMETRIC SURFACE MAP

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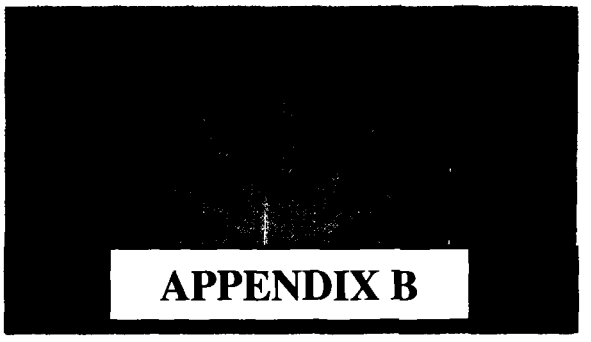


APPENDIX B

SUMMARY OF ANALYTICAL RESULTS

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-06R

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	6.3 B	13.3 B	6.0 B	3.0	7.0	3.7	3.7	60	60
Arsenic	8.3 B	8.1 B	3.6 U	3.6	2.9	2.9	2.9	20	10
Barium	244	266	254	256	224	309 J	294	1,000	200
Beryllium	0.5 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	189,000		5,000
Chromium	0.7 U	1.1 B	3.5 B	2.1	2.6	2.6	0.8	11	10
Cobalt	—	—	—	—	—	—	0.4		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.9	1.3	1.7	25	25
Iron	79.8 B	92.2 B	4.9 U	79.2	14.1	14.1	14.1	7,000	100
Lead	1.3 U	1.3 U	1.3 UJ	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	30,500		5,000
Manganese	—	—	—	—	—	—	77		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	0.5 U	3.6 B	1.6 B	1.8	1.8	1.7	1.8	96	40
Potassium	—	—	—	—	—	—	2,400		5,000
Selenium	11.0 J	8.5 J	4.0 U	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	4.5 B	1.9 B	5.5 B	0.5	0.4	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	21,500		5,000
Thallium	9.0 J	3.7 B	3.6 UJ	3.6	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	8.2 J	0.8 U	10.7 B	0.8 UJ	1.5	13.5	0.6 UJ	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	17,000 J		
Antimony	—	—	28.7 B	3.0	6.9	3.7	3.7		
Arsenic	—	—	73.2	38.8	2.9	13.2	20.5		
Barium	—	—	1,120	852	336	493	568		
Beryllium	—	—	3.3 B	2.5	0.1	0.3	1.2		
Cadmium	—	—	2.0 B	0.2 UJ	0.2	0.2	0.2		
Calcium	—	—	—	—	—	—	378,000		
Chromium	—	—	82.3	64.2	12.3	21.4 J	27.0		
Cobalt	—	—	—	—	—	—	24.1		
Copper	—	—	138	108 J	16.7	32.1	52.1		
Cyanide	4.0 U	4.0 U	4.0 UJ	4.0	3.0	3.0	3.0	10	10
Iron	—	—	123,000	94,100	13,100	27,200 J	45,400		
Lead	—	—	95.4 J	100 J	9.6 J	26.0 J	46.0		
Magnesium	—	—	—	—	—	—	115,000		
Manganese	—	—	—	—	—	—	2,940		
Mercury	—	—	0.2	0.2 J	0.1	0.1	0.1		
Nickel	—	—	114	88.2	14.1	26.0	41.2		
Potassium	—	—	—	—	—	—	5,050		
Selenium	—	—	65.7	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	—	—	10.6	0.5	0.4	0.4	0.4		
Sodium	—	—	—	—	—	—	22,100		
Thallium	—	—	3.6 UJ	4.9 J	2.6 UJ	2.6 UJ	2.6		
Vanadium	—	—	—	—	—	—	41.5		
Zinc	—	—	379	279 J	61.5	87.8 J	147 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Tetrachloroethene							0.11 J	5	10
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Bis (2-ethlyhexyl) phthalate	10.0 U	12.0 U	10.0 U	906	10.0 U	10.0 U	10.0 U	49	10
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-07R

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	7.1 B	5.6 B	12.4 B	3.3	3.7	3.7	3.7	60	60
Arsenic	12.6	10.6	7.7 B	3.6	2.9	2.9	4.5	20	10
Barium	89.8 B	100 B	123 B	99.9	98.8	152 J	131	1,000	200
Beryllium	0.4 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	229,000		5,000
Chromium	0.7 U	0.7 U	2.9 B	2.7	2.0	2.9	0.8	11	10
Cobalt	—	—	—	—	—	—	1.4		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.2	1.2	1.2	25	25
Iron	3,580	1,760	1,250	241	146	301 J	3,580	7,000	100
Lead	1.3 U	1.3 U	1.3 UJ	1.3 R	1.5 J	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	33,000		5,000
Manganese	—	—	—	—	—	—	849		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	0.9 B	3.1 B	1.9 B	3.4	3.2	2.4	1.6	96	40
Potassium	—	—	—	—	—	—	3,260		5,000
Selenium	11.0 J	11.3 J	4.0 U	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	4.4 B	0.9 B	4.7 B	0.5	0.4	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	42,200		5,000
Thallium	15.8 J	10.5	3.6 UJ	3.6	2.6 J	2.6	2.6 UJ	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	0.8 UJ	10.1 B	11.3 B	0.8 UJ	10.2	10.9	30.7 J	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	3,130 J		
Antimony	—	—	14.2 B	3.0	3.7	3.7	3.7		
enic	—	—	9.8 B	3.6	2.9	14.6	5.3		
ium	—	—	454	260.0	132	699	204		
Beryllium	—	—	0.2 B	0.1	0.1	0.3	0.1		
Cadmium	—	—	0.2 U	0.2 UJ	0.2	0.2	0.2		
Calcium	—	—	—	—	—	—	246,000		
Chromium	—	—	19.3	9.1	3.7	21.5 J	4.9		
Cobalt	—	—	—	—	—	—	4.3		
Copper	—	—	21.8 B	8.2 J	4.2	30.4	10.0		
Cyanide	4.0 U	4.0 U	4.0 U	4.0	3.0	3.0	3.0	10	10
Iron	—	—	24,800	10,200	2,380	29,000 J	9,890		
Lead	—	—	9.1 J	1.3 R	1.5 UJ	16.8 J	5.2		
Mangesium	—	—	—	—	—	—	41,600		
Manganese	—	—	—	—	—	—	969		
Mercury	—	—	0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel	—	—	21.3 B	10.4	4.7	25.3	10.5		
Potassium	—	—	—	—	—	—	3,780		
Selenium	—	—	4.0 U	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	—	—	5.2 B	0.5	0.4	0.4	0.4		
Sodium	—	—	—	—	—	—	41,200		
Thallium	—	—	3.6 UJ	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	—	—	—	—	—	—	6.5		
Zinc	—	—	63.1	27.6 J	50.7	90.3 J	22.7 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-24

Compound	Sampling Event (All Results Expressed in Units of µg/l) Annual Results November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]			
Aluminum	25.8		200
Antimony	3.7 U	60	60
Arsenic	3.6 B	20	10
Barium	90.4 B	1,000	200
Beryllium	0.1 U	5	5
Cadmium	0.2 U	5	5
Calcium	111,000		5,000
Chromium	0.8 U	11	10
Cobalt	0.4		50
Copper	2.1 B	25	25
Iron	1,000	7,000	100
Lead	1.5 U	4.2	3
Magnesium	26,400		5,000
Manganese	169		15
Mercury	0.1 U	0.2	0.2
Nickel	0.7 U	96	40
Potassium	3,210		5,000
Selenium	4.4 U	8.5	5
Silver	0.4 U	10	10
Sodium	29,300		5,000
Thallium	2.6 U	40	10
Vanadium	0.9		50
Zinc	1.9 B	86	20
Inorganics - Metals and Cyanide (Total)			
Aluminum	13,000 J		
Antimony	3.7 U		
Arsenic	8.4 B		
Barium	162 B		
Beryllium	0.7 B		
Cadmium	0.2 U		
Calcium	544,000		
Chromium	19.5		
Cobalt	13.9		
Copper	21.6 B		
Cyanide	3.0 U	10	10
Iron	30,500		
Lead	20.8		
Magnesium	73,800		
Manganese	1,960		
Mercury	0.1 U		
Nickel	28.2 B		
Potassium	6,610		
Selenium	4.4 U		
Silver	0.4 U		
Sodium	31,500		
Thallium	2.6 U		
Vanadium	26.6		
Zinc	63.1		
Volatile Organic Compounds (VOCs)	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL		
Pesticides / PCBs	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-26

	Sampling Event (All Results Expressed in Units of µg/l)		
	Annual Results		
Compound	**November-03**	**TRIGGER LEVEL**	**CRQL**
Inorganics - Metals (Dissolved)[13]			
Aluminum	25.8		200
Antimony	4.1	60	60
Arsenic	5.9	20	10
Barium	344 J	1,000	200
Beryllium	0.1	5	5
Cadmium	0.2	5	5
Calcium	69,200		5,000
Chromium	0.8	11	10
Cobalt	1.0		50
Copper	2.0	25	25
Iron	442	7,000	100
Lead	1.5	4.2	3
Magnesium	38,500		5,000
Manganese	134		15
Mercury	0.1	0.2	0.2
Nickel	1.7	96	40
Potassium	19,500		5,000
Selenium	4.4 R	8.5	5
Silver	0.4	10	10
Sodium	187,000		5,000
Thallium	2.6 UJ	40	10
Vanadium	0.8		50
Zinc	0.6 UJ	86	20
Inorganics - Metals and Cyanide (Total)			
Aluminum	3,860 J		
Antimony	3.7 U		
Arsenic	2.9 B		
Barium	352		
Beryllium	0.2 B		
Cadmium	0.5 B		
Calcium	96,700		
Chromium	20.6		
Cobalt	5.8		
Copper	20.1 B		
Cyanide	3.0 U	10	10
Iron	10,300		
Lead	8.5		
Magnesium	41,900		
Manganese	320		
Mercury	0.1 U		
Nickel	16.8 B		
Potassium	19,100		
Selenium	4.4 UJ		
Silver	0.4 U		
Sodium	173,000		
Thallium	2.6 U		
Vanadium	2.2		
Zinc	32.2		
Volatile Organic Compounds (VOCs)	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL		
Pesticides / PCBs	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = *Constituent not analyzed.*
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon re

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-30

	Sampling Event (All Results Expressed in Units of µg/l)		
	Annual Results		
Compound	**November-03**	**TRIGGER LEVEL**	**CRQL**
Inorganics - Metals (Dissolved)[13]			
Aluminum	25.8		200
Antimony	3.7 U	60	60
Arsenic	2.9 U	20	10
Barium	334	1,000	200
Beryllium	0.1 U	5	5
Cadmium	0.2 U	5	5
Calcium	60,800		5,000
Chromium	0.8 U	11	10
Cobalt	0.4		50
Copper	5.4 B	25	25
Iron	427	7,000	100
Lead	1.5 U	4.2	3
Magnesium	28,900		5,000
Manganese	29.5		15
Mercury	0.1 U	0.2	0.2
Nickel	0.7 U	96	40
Potassium	12,600		5,000
Selenium	4.4 U	8.5	5
Silver	0.4 U	10	10
Sodium	146,000		5,000
Thallium	2.6 U	40	10
Vanadium	0.8		50
Zinc	0.6 U	86	20
Inorganics - Metals and Cyanide (Total)			
Aluminum	516		
Antimony	3.7 U		
Arsenic	2.9 U		
Barium	318		
Beryllium	0.1 U		
Cadmium	0.2 B		
Calcium	61,000		
Chromium	6.0 B		
Cobalt	0.4		
Copper	8.4 B		
Cyanide	3.0 U	10	10
Iron	2,090		
Lead	1.5 U		
Magnesium	29,200		
Manganese	48.2		
Mercury	0.1 U		
Nickel	4.5 B		
Potassium	12,700		
Selenium	4.4 U		
Silver	0.4 U		
Sodium	145,000		
Thallium	2.6 U		
Vanadium	0.8		
Zinc	6.5 B		
Volatile Organic Compounds (VOCs)	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL		
Pesticides / PCBs	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-58

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	5.0 B	5.5 B	9.7 B	3.0	4.9	3.7	3.7	60	60
Arsenic	10.5	8.2 B	3.6 U	3.6	2.9	3.1	6.0	20	10
Barium	*146 B*	*170 B*	*50.9 B*	*163*	*158*	*162 J*	228	1,000	200
Beryllium	0.3 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	96,400		5,000
Chromium	0.7 U	0.7 U	2.9 B	2.7	2.8	2.5	0.8	11	10
Cobalt	—	—	—	—	—	—	0.4		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.2	1.2	1.2	25	25
Iron	3,610	3,440	4.9 U	249	1,140	488 J	2,890	7,000	100
Lead	1.3 U	1.3 U	1.3 U	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	32,800		5,000
Manganese	—	—	—	—	—	—	354		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	2.7 B	2.6 B	1.7 B	2.2	2.4	1.2	1.3	96	40
Potassium	—	—	—	—	—	—	5,210		5,000
Selenium	4.0 U	4.0 UJ	4.0 UJ	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	3.4 B	0.5 U	4.1 B	0.5	0.4	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	34,400		5,000
Thallium	14.3	6.3 B	3.6 U	3.6	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	0.8 U	1.6 B	11.0 B	0.8 UJ	19.2	7.7	0.6 UJ	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	41,600		
Antimony	—	—	14.3 B	3.0	5.2	3.7	3.7		
Arsenic	—	—	17.5	17.1	3.2	20.6	32.9		
Barium	—	—	422	540	367.0	391	822		
Beryllium	—	—	1.0 B	1.3	0.3	0.7	2.9		
Cadmium	—	—	0.2 U	0.2 UJ	0.2	0.2	1.8		
Calcium	—	—	—	—	—	—	745,000		
Chromium	—	—	51.3	63.1	14.9	42.6 J	112		
Cobalt	—	—	—	—	—	—	57.2		
Copper	—	—	47.7	42.5 J	27.8	43.2	138		
Cyanide	4.0 U	4.0 U	4.0	4.0	3.0	3.0	3.0	10	10
Iron	—	—	54,500	61,900	17,000	40,800 J	129,000		
Lead	—	—	19.8 J	38.5 UJ	23.0 J	26.8 J	92.7		
Magnesium	—	—	—	—	—	—	148,000		
Manganese	—	—	—	—	—	—	4,200		
Mercury	—	—	0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel	—	—	56.2	66.5	20.1	50.6	124		
Potassium	—	—	—	—	—	—	11,800		
Selenium	—	—	*4.0 U*	*4.0 R*	*4.4*	*4.4 R*	*4.4 UJ*		
Silver	—	—	5.9 B	0.5	0.4	0.4	1.6		
Sodium	—	—	—	—	—	—	36,900		
Thallium	—	—	3.6 UJ	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	—	—	—	—	—	—	74.0		
Zinc	—	—	153	164 J	78.7	137 J	367 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
acetone						8.0	5.0 U		10
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-59

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	7.1 B	9.9 B	13.1 B	3.0	8.0	7.2	6.5	60	60
Arsenic	14.0	13.0	5.9 B	3.6	2.9	2.9	2.9	20	10
Barium	112 B	142 B	65.6 B	35.7	37.2	38.1 J	40.7	1,000	200
Beryllium	0.4 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	261,000		5,000
Chromium	4.1 B	9.6 B	4.6 B	4.9	4.4	3.3	0.8	11	10
Cobalt	—	—	—	—	—	—	0.4		50
Copper	3.4 B	2.2 B	1.0 U	1.0 UJ	3.5	3.0	4.0	25	25
Iron	3,360	4,900	4.9 U	591	14.1	14.1	14.1	7,000	100
Lead	1.3 U	1.5 B	1.3 UJ	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	59,500		5,000
Manganese	—	—	—	—	—	—	27.3		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	8.1 B	12.3 B	1.8 B	3.5	3.5	3.0	2.3	96	40
Potassium	—	—	—	—	—	—	29,800		5,000
Selenium	13.7 J	15.8 J	18.2	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	4.0 B	2.7 B	7.2 B	0.5	0.4	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	186,000		5,000
Thallium	12.9 J	8.8 B	3.6 UJ	3.6 UJ	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	18.2 J	7.9 B	7.2 B	0.8 J	1.2	18.4	0.6 UJ	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	3,710 J		
Antimony	—	—	19.5 B	3.0	3.7	3.7	3.7		
Arsenic	—	—	36.5	3.6	2.9	3.6	4.3		
Barium	—	—	215	202	55.2	62.1	213		
Beryllium	—	—	1.9 B	0.1	0.1	0.1	0.1		
Cadmium	—	—	0.7 B	0.2 UJ	0.2	0.2	0.2		
Calcium	—	—	—	—	—	—	281,000		
Chromium	—	—	82.4	18.8	5.4	8.3 J	19.1		
Cobalt	—	—	—	—	—	—	7.4		
Copper	—	—	45.0	1.0 UJ	3.6	6.0	11.9		
Cyanide	4.0 U	4.0 U	4.0	4.0	3.0	3.0	3.0	10	10
Iron	—	—	79,700	9,810	1,390	2,240 J	12,900		
Lead	—	—	36.7 J	1.3 R	1.5 UJ	5.7 J	10.0		
Magnesium	—	—	—	—	—	—	62,400		
Manganese	—	—	—	—	—	—	923		
Mercury	—	—	0.1 B	0.1 UJ	0.1	0.1	0.1		
Nickel	—	—	77.2	16.0	4.8	6.5	20.0		
Potassium	—	—	—	—	—	—	31,900		
Selenium	—	—	21.6	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	—	—	7.6 B	0.5	0.4	0.4	0.4		
Sodium	—	—	—	—	—	—	180,000		
Thallium	—	—	3.6 UJ	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	—	—	—	—	—	—	5.9		
Zinc	—	—	238	18.9 J	16.3	21.2 J	36.3 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
1,1-Dichloroethane					0.2 J	1.0 U	1.0 U		10
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-60

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	**June-02**	**September-02**	**December-02**	**February-03**	**May-03**	**August-03**	**November-03**	**TRIGGER LEVEL**	**CRQL**
Inorganics - Metals (Dissolved)[13]	Insufficient Volume	Insufficient Volume		Insufficient Volume	Insufficient Volume	Insufficient Volume			
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	—	—	11.3 B	—	6.7	—	3.7	60	60
Arsenic	—	—	3.6 U	—	2.9	—	2.9	20	10
Barium	—	—	43 B	—	60.9	—	28.7	1,000	200
Beryllium	—	—	0.1 U	—	0.1	—	0.1	5	5
Cadmium	—	—	0.2 U	—	0.2	—	0.2	5	5
Calcium	—	—	—	—	—	—	100,000		5,000
Chromium	—	—	4.6 B	—	2.7	—	0.8	11	10
Cobalt	—	—	—	—	—	—	0.4		50
Copper	—	—	1.0 U	—	3.0	—	4.2	25	25
Iron	—	—	1.3 UJ	—	14.1	—	14.1	7,000	100
Lead	—	—	0.1 U	—	1.5 UJ	—	1.5	4.2	3
Magnesium	—	—	—	—	—	—	20,100		5,000
Manganese	—	—	—	—	—	—	2.4		15
Mercury	—	—	3.4 B	—	0.1	—	0.1	0.2	0.2
Nickel	—	—	13.3	—	1.1	—	0.7	96	40
Potassium	—	—	—	—	—	—	6,970		5,000
Selenium	—	—	5.8 B	—	4.4	—	4.4 R	8.5	5
Silver	—	—	3.6 UJ	—	0.4	—	0.4	10	10
Sodium	—	—	—	—	—	—	201,000		5,000
Thallium	—	—	10.4 B	—	2.6 UJ	—	2.6 UJ	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	—	—	10.4 B	—	4.5	—	0.6 UJ	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	13,400 J		
Antimony	—	—	8.4 B	—	3.7	—	3.7		
Arsenic	—	—	5.7 B	—	2.9	—	11.7		
Barium	—	—	88.5 B	—	73.1	—	89.8		
Beryllium	—	—	0.1 U	—	0.1	—	0.9		
Cadmium	—	—	0.2 U	—	0.2	—	0.2		
[illegible]ium	—	—	—	—	—	—	158,000		
[illegible]nium	—	—	7.3 B	—	10.9	—	33.2		
[illegible]alt	—	—	—	—	—	—	16.6		
Copper	—	—	1.0 U	—	7.5	—	29.3		
Cyanide	—	—	4.0 U	—	3.0	—	3.0	10	10
Iron	—	—	2,780	—	7830	—	31,300		
Lead	—	—	1.3 UJ	—	1.5 UJ	—	28.2		
Magnesium	—	—	—	—	—	—	32,500		
Manganese	—	—	—	—	—	—	555		
Mercury	—	—	0.1 U	—	0.1	—	0.1		
Nickel	—	—	7.4 B	—	7.8	—	31.6		
Potassium	—	—	—	—	—	—	9,290		
Selenium	—	—	14.3	—	4.4	—	4.4 UJ		
Silver	—	—	5.0 B	—	0.4	—	0.4		
Sodium	—	—	—	—	—	—	212,000		
Thallium	—	—	3.6 UJ	—	2.6 UJ	—	2.6		
Vanadium	—	—	—	—	—	—	23.2		
Zinc	—	—	28.3	—	34.2	—	135 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	—	BRL	BRL	BRL	—	BRL		
Pesticides / PCBs	—	—	BRL	—	BRL	—	BRL		

Notes:

1) *All results expressed in micrograms per liter (µg/L).*
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) *J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.*
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-61

Compound	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	7.3 B	6.3 B	6.7 B	3.0	7.3	3.7	3.7	60	60
Arsenic	12.5	10.6	13.7	3.6	2.9	4.7	7.5	20	10
Barium	107 B	104 B	98.2 B	64.7	67.7	77.7 J	83.3	1,000	200
Beryllium	0.1 U	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	191,000		5,000
Chromium	0.9 B	0.7 U	4.4 B	1.6	3.3	3.8	0.8	11	10
Cobalt	—	—	—	—	—	—	2.0		50
Copper	3.6 B	1.0 U	1.0 U	1.0 UJ	1.2	1.2	1.2	25	25
Iron	9,070	2,770	12,500	3,270	1,940	6,100 J	5,100	7,000	100
Lead	1.3 U	1.3 U	1.3 UJ	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	35,700		5,000
Manganese	—	—	—	—	—	—	866		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	4.5 B	3.1 B	5.0 B	2.4	4.2	4.0	4.0	96	40
Potassium	—	—	—	—	—	—	10,100		5,000
Selenium	4.0 U	5.3 J	4.0 U	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	2.7 B	0.7 B	3.4 B	0.5	0.4	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	28,300		5,000
Thallium	9.7 J	5.6 B	3.6 UJ	3.6	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	12.9 J	4.1 B	18.5 B	0.8 UJ	7.4	13.1	4.8 J	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	1,080		
Antimony	—	—	6.7 B	3.0	4.5	3.7	3.7		
Arsenic	—	—	13.7	3.6	3.2	17.9	3.7		
Barium	—	—	98.2 B	84.4	69.5	202	91.3		
Beryllium	—	—	0.1 U	0.1	0.1	0.2	0.1		
Cadmium	—	—	0.2 U	0.2 UJ	0.2	0.2	0.2		
Calcium	—	—	—	—	—	—	190,000		
Chromium	—	—	4.4 B	5.6	2.9	23.2 J	2.1		
Cobalt	—	—	—	—	—	—	3.3		
Copper	—	—	1.0 U	1.0 UJ	1.2	28.2	4.2		
Cyanide	4.0 U	4.0 U	4.0 U	4.0	3.0	3.0	3.0	10	10
Iron	—	—	12,500	8,720	2,330	33,400 J	8,640		
Lead	—	—	1.3 UJ	1.3 R	1.5 UJ	19.7 J	1.6		
Magnesium	—	—	—	—	—	—	37,500		
Manganese	—	—	—	—	—	—	922		
Mercury	—	—	0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel	—	—	5.0 B	6.6	4.1	29.5	7.6		
Potassium	—	—	—	—	—	—	9,430		
Selenium	—	—	4.0 U	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	—	—	3.4 B	0.5	0.4	0.4	0.4		
Sodium	—	—	—	—	—	—	27,700		
Thallium	—	—	3.6 UJ	3.8 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	—	—	—	—	—	—	0.8		
Zinc	—	—	18.5 B	9.9 J	18.3	96.7 J	13.8 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	1.0 U		10
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Bis (2-ethlyhexyl) phthalate	12.2 U	12.0 U	57.0 J	10.0 U	10.0 U	40.6	10.0 U	49	10
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-62A

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	3.7 B	7.3 B	12.7 B	3.0	9.6	3.7	3.7	60	60
Arsenic	3.6 U	4.9 B	3.6 U	3.6	2.9	2.9	2.9	20	10
Barium	145 B	174 B	157 B	162	146	145 J	126	1,000	200
Beryllium	0.3 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	123,000		5,000
Chromium	0.7 U	1.5 B	4.1 B	3.5	3.5	3.5	0.8	11	10
Cobalt	—	—	—	—	—	—	0.4		50
Copper	6.3 B	1.1 B	5.2 B	1.0 UJ	4.4	2.4	2.7	25	25
Iron	36.1 B	6.2 B	4.9 U	317	14.1	14.1	14.1	7,000	100
Lead	1.3 U	1.3 U	1.3 UJ	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Mangesium	—	—	—	—	—	—	49,200		5,000
Manganese	—	—	—	—	—	—	51.4		15
Mercury	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	1.5 B	3.2 B	2.7 B	1.8	2.1	0.7	0.9	96	40
Potassium	—	—	—	—	—	—	10,800		5,000
Selenium	4.0 U	4.0 U	4.0 U	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	1.9 B	0.5 U	6.0 B	0.5	0.5	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	120,000		5,000
Thallium	5.1 J	7.9 B	3.6 UJ	3.6	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	4.3 J	0.8 U	11.4 B	0.8 UJ	7.4	11.0	0.9 J	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	24,100 J		
Antimony	—	—	18.4 B	3.0	4.7	3.7	3.7		
Arsenic	—	—	17.0	20.7	8.7	18.3	17.7		
Barium	—	—	471	1,170	615	800	633		
Beryllium	—	—	0.5 B	1.7	0.8	1.1	1.5		
Cadmium	—	—	0.2 U	0.2 UJ	0.2	0.2	1.1		
Calcium	—	—	—	—	—	—	618,000		
Chromium	—	—	38.6	85.5	49.3	68.6 J	49.5		
Cobalt	—	—	—	—	—	—	33.5		
Copper	—	—	42.3	76.1 UJ	45.2	68	72.8		
Cyanide	4.0 U	4.0 U	4.0 U	4.0	—	3.0	3.0	10.0	10.0
Iron	—	—	34,000	85,100	51,500	65,400 J	60,800		
Lead	—	—	33.3 J	68.0 UJ	33.6 J	65.2 J	72.8		
Magnesium	—	—	—	—	—	—	137,000		
Manganese	—	—	—	—	—	—	3,380		
Mercury	—	—	0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel	—	—	38.1 B	86.4	53.4	75.7	64.3		
Potassium	—	—	—	—	—	—	15,100		
Selenium	—	—	13.7	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	—	—	5.4 B	0.5	0.4	0.4	0.4		
Sodium	—	—	—	—	—	—	121,000		
Thallium	—	—	3.6 UJ	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	—	—	—	—	—	—	40.5		
Zinc	—	—	119	242 J	179	234 J	181 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-62B

	Sampling Event (All Results Expressed in Units of µg/l)										
	Baseline Results							Quarterly Results			
Compound	**October-01**	**March-02**	**June-02**	**September-02**	**December-02**	**February-03**	**May-03**	**August-03**	**November-03**	**TRIGGER LEVEL**	**CRQL**
Inorganics - Metals (Dissolved)[13]	Well is Dry	Well is Dry	Well is Dry	Well is Dry	Well is Dry	Well is Dry	Insufficient Volume	Well is Dry	Well is Dry		
Inorganics - Metals and Cyanide (Total)	—	—	—	—	—	—	—	—	—		
Volatile Organic Compounds (VOCs)	—	—	—	—	—	—	BRL	—	—		
Benzene	—	—	—	—	—	—	3.00	—	—	5	10.0
Semi-Volatile Organic Compounds (SVOCs)	—	—	—	—	—	—	BRL	—	—		
Bis (2-Chloroethyl) ether	—	—	—	—	—	—	24.5	—	—	13.6	10.0
Pesticides / PCBs	—	—	—	—	—	—	BRL	—	—		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = No Sample Available (Well Dry)
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-63

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	9.2 B	11.4 B	13.8 B	3.0	8.9	7.1	3.7	60	60
Arsenic	18.3	15.9	9.5 B	3.6	2.9	2.9	5.4	20	10
Barium	76.7 B	97.5 B	76.2 B	72.2	50.1	58.8 J	68.6	1,000	200
Beryllium	0.2 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	278,000		5,000
Chromium	0.7 U	1.2 B	3 B	3.6	3.4	3.2	0.8	11	10
Cobalt	—	—	—	—	—	—	4.1		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.2	1.2	1.2	25	25
Iron	729	592	758	622	297	1,890 J	1,150	7,000	100
Lead	1.3 U	1.3 U	1.3 UJ	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	61,000		5,000
Manganese	—	—	—	—	—	—	2,600		15
Mercury	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	9.8 B	12.8 B	7.4 B	6.6	5.9	8.3	6.9	96	40
Potassium	—	—	—	—	—	—	11,600		5,000
Selenium	18.7	15.3	8.7	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	4.9 B	2.0 B	3.6 B	0.5	0.4	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	72,100		5,000
Thallium	22.9 J	15.9	3.6 UJ	3.6	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	0.8 UJ	0.8 U	7.8 B	0.8 UJ	12.9	10.8	3.7 J	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	10,500 J		
Antimony	—	—	20.2 B	3.0	4.6	3.7	3.7		
Arsenic	—	—	22.8	30.4	12.6	12.6	9.3		
Barium	—	—	234	390	178	217	147		
Beryllium	—	—	1.0 B	2.3	0.9	0.9	0.6		
Cadmium	—	—	0.2 U	0.2 UJ	0.2	0.2	0.2		
Calcium	—	—	—	—	—	—	465,000		
Chromium	—	—	39.2	70.8	30.8	36.1 J	13.7		
Cobalt	—	—	—	—	—	—	17.5		
Copper	—	—	35.7	77.8 J	29.3	33.0	17.4		
Cyanide	4.0 U	4.0 U	4.0 U	4.0	3.0	3.0	3.0	10	10
Iron	—	—	55,500	109,000	44,100	53,900 J	25,800		
Lead	—	—	21.2 J	70.2 UJ	28.5 J	36 J	23.4		
Magnesium	—	—	—	—	—	—	96,100		
Manganese	—	—	—	—	—	—	4,090		
Mercury	—	—	0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel	—	—	56.6	104	47.5	59.6	31.0		
Potassium	—	—	—	—	—	—	13,500		
Selenium	—	—	27.8	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	—	—	7.3 B	0.5	0.4	0.4	0.4		
Sodium	—	—	—	—	—	—	73,600		
Thallium	—	—	3.6 U	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	—	—	—	—	—	—	17.8		
Zinc	—	—	160	267 J	129	182 J	66.3 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Acetone	5.0 U	5.0 U	5.0 R	5.0 U	78.0 J	5.0 U	5.0 U		10
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U		10
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-64

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	6.6 B	5.9 B	12.3 B	3.0	5.3	4.2	3.7	60	60
Arsenic	12.7	9.2 B	7.3 B	3.6	2.9	2.9	2.9	20	10
Barium	34.5 B	34.6 B	53.5 B	31.0	28.9	31.5 J	44.6	1,000	200
Beryllium	0.4 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	185,000		5,000
Chromium	0.7 U	1.2 B	20.4	4.9	6.5	3.8	0.8	11	10
Cobalt	—	—	—	—	—	—	0.5		50
Copper	3.0 B	1.8 B	10.4 B	1.0 UJ	4.9	4.5	3.4	25	25
Iron	1,010	4.9 U	19,500	63.2 R	52.6	14	14.1	7,000	100
Lead	1.3 U	1.3 U	3.7 J	1.3 UJ	1.5 UJ	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	61,800		5,000
Manganese	—	—	—	—	—	—	292		15
Mercury	0.1 U	0.1 U	0.1 U	0.1	0.1	0.1	0.1	0.2	0.2
Nickel	14.0 B	10.9 B	33.6 B	12.8 R	13.4	9.4	5.2	96	40
Potassium	—	—	—	—	—	—	12,300		5,000
Selenium	15.1 J	6.6 J	4.6 B	4.0	4.4	4.4	4.4 R	8.5	5
Silver	4.6 B	0.8 B	5.7 B	0.5	0.4	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	67,600		5,000
Thallium	11.1 J	3.9 B	3.6 UJ	3.6	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	23.9 J	0.8 U	64.5	0.8 UJ	9.1	16.1	2.6 J	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	18,700 J		
Antimony	—	—	12.3 B	3.0	5.6	3.7	3.7		
Arsenic	—	—	7.3 B	4.3	2.9	6.2	10.8		
Barium	—	—	53.5 B	59.5	47.9	58.3	95.9		
Beryllium	—	—	0.1 U	0.5	0.1	0.2	1.0		
Cadmium	—	—	0.2 U	0.2 UJ	0.2	0.2	0.2		
Calcium	—	—	—	—	—	—	311,000		
Chromium	—	—	20.4	22.9	14.8	22.4 J	29.4		
Cobalt	—	—	—	—	—	—	23.1		
Copper	—	—	10.4 B	2.2 J	9.6	16.0	16.3		
Cyanide	4.0 U	4.0 U	4.0 U	4.0	3.0	3.0	3.0	10	10
Iron	—	—	19,500	25,900	14,700	24,300 J	42,900		
Lead	—	—	3.7 J	8.1 UJ	1.7 J	9.7 J	20.0		
Magnesium	—	—	—	—	—	—	77,300		
Manganese	—	—	—	—	—	—	2,390		
Mercury	—	—	0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel	—	—	33.6 B	38.3	26.1	33.9	46.0		
Potassium	—	—	—	—	—	—	14,700		
Selenium	—	—	4.6 B	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	—	—	5.7 B	0.5	0.4	0.4	0.4		
Sodium	—	—	—	—	—	—	68,300		
Thallium	—	—	3.6 UJ	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	—	—	—	—	—	—	27.3		
Zinc	—	—	64.5	51.3 J	69.1	73.6 J	114 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Bis (2-ethlyhexyl) phthalate	10.0 U	12.0 U	10.0 U	10.0 U	10.0 U	10.0	10.0 U	49	10
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Monitoring Well GW-65

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	**June-02**	**September-02**	**December-02**	**February-03**	**May-03**	**August-03**	**November-03**	**TRIGGER LEVEL**	**CRQL**
Inorganics - Metals (Dissolved)[13]	Insufficient Volume	Insufficient Volume	Insufficient Volume	Insufficient Volume	Insufficient Volume	Insufficient Volume	Insufficient Volume		
Antimony	—	—	—	—	—	—	—	60	60
Arsenic	—	—	—	—	—	—	—	20	10
Barium	—	—	—	—	—	—	—	1,000	200
Beryllium	—	—	—	—	—	—	—	5	5
Cadmium	—	—	—	—	—	—	—	5	5
Chromium	—	—	—	—	—	—	—	11	10
Copper	—	—	—	—	—	—	—	25	25
Iron	—	—	—	—	—	—	—	7,000	100
Lead	—	—	—	—	—	—	—	4.2	3
Mercury	—	—	—	—	—	—	—	0.2	0.2
Nickel	—	—	—	—	—	—	—	96	40
Selenium	—	—	—	—	—	—	—	8.5	5
Silver	—	—	—	—	—	—	—	10	10
Thallium	—	—	—	—	—	—	—	40	10
Zinc	—	—	—	—	—	—	—	86	20
Inorganics - Metals and Cyanide (Total)									
Antimony	—	—	—	—	—	—	—		
Arsenic	—	—	—	—	—	—	—		
Barium	—	—	—	—	—	—	—		
Beryllium	—	—	—	—	—	—	—		
Cadmium	—	—	—	—	—	—	—		
Chromium	—	—	—	—	—	—	—		
Copper	—	—	—	—	—	—	—		
Cyanide	—	—	—	—	—	—	—	10	10
Iron	—	—	—	—	—	—	—		
Lead	—	—	—	—	—	—	—		
Mercury	—	—	—	—	—	—	—		
Nickel	—	—	—	—	—	—	—		
Selenium	—	—	—	—	—	—	—		
Silver	—	—	—	—	—	—	—		
Thallium	—	—	—	—	—	—	—		
Zinc	—	—	—	—	—	—	—		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	—	—		
4-Nitrophenol	62.5 U	50.0 U	29.8 UJ	10.0 U	10.0 U	—	—	150	25
Bis (2-ethlyhexyl) phthalate	25.0 U	20.0 U	11.9 U	10.0 U	10.0 U			49	10
Pesticides / PCBs	—	—	—	—	—	—	—		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = No Sample Available (Well Dry)
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-50

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	4.9 B	3.9 B	9.7 B	3.0 U	9.7 B	3.7	3.7	60	60
Arsenic	8.3 B	3.6 U	3.6 U	3.6 U	3.6 U	7.1	2.9	20	10
Barium	48.3 B	69.3 B	50.9 B	57.7 B	50.9 B	55.2	40.0	1,000	200
Beryllium	0.5 B	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	84,100		5,000
Chromium	0.7 U	0.7 U	2.9 B	2.1 B	2.9 B	1.8	0.8	11	10
Cobalt	—	—	—	—	—	—	0.5		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	3.1	4.4	25	25
Iron	83.4 B	56.0 B	4.9 U	129	4.9 U	14.1	14.1	7,000	100
Lead	1.3 U	1.3 U	1.3 U	1.3 R	1.3 U	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	23,400		5,000
Manganese	—	—	—	—	—	—	3.8		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	0.2	0.2
Nickel	0.9 B	0.8 B	1.7 B	0.8 B	1.7 B	0.7	0.7	96	40
Potassium	—	—	—	—	—	—	3,840		5,000
Selenium	4.0 U	4.0 UJ	4.0 UJ	4.0 R	4.0 UJ	4.4	4.4 R	8.5	5
Silver	4.2 B	0.7 B	4.1 B	0.5 U	4.1 B	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	32,100		5,000
Thallium	9.1 J	4.0 B	3.6 U	4.3 J	3.6 U	6.8 J	2.6	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	36.2 J	1.3 B	11.0 B	0.8 UJ	11.0 B	13.8	0.6 UJ	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	25.8		
Arsenic	—	—	3.6 U	3.6 U	3.6 U	2.9	3.4		
Barium	—	—	50.7 B	58.1 B	50.7 B	55.4	41.3		
Beryllium	—	—	0.1 U	0.1 U	0.1 U	0.1	0.1		
Cadmium	—	—	0.2 U	0.2 UJ	0.2 U	0.2	0.2		
Calcium	—	—	—	—	—	—	86,400		
Chromium	—	—	3.2 B	2.3 B	3.2 B	1.7	0.8		
Cobalt	—	—	—	—	—	—	0.4		
Copper	—	—	4.4 B	5.7 J	4.4 B	2.5	4.4		
Cyanide	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	3.0	3.0	10	10
Iron	—	—	4.9 U	141	4.9 U	23.5	69.2		
Lead	—	—	1.3 U	1.3 R	1.3 U	1.5	1.5		
Magnesium	—	—	—	—	—	—	23,900		
Manganese	—	—	—	—	—	—	5.8		
Mercury	—	—	0.1 U	0.1 U	0.1 U	0.1	0.1		
Nickel	—	—	1.3 B	0.5 U	1.3 B	1.5	0.7		
Potassium	—	—	—	—	—	—	3,990		
Selenium	—	—	4.0 U	4.0 R	4.0 U	4.4 UJ	4.4 R		
Silver	—	—	4.3 B	0.5 U	4.3 B	0.4	0.4		
Sodium	—	—	—	—	—	—	33,000		
Thallium	—	—	3.6 UJ	3.6 UJ	3.6 UJ	5.5 J	2.6		
Vanadium	—	—	—	—	—	—	0.8		
Zinc	—	—	13.1 B	2.0 J	13.1 B	10.9	1.3 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Diethylphthalate							2.17 J		10
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-51

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	5.6 B	5.3 B	8.7 B	3.0 U	8.7 B	3.7	3.7	60	60
Arsenic	7.1 B	5.8 U	3.6 U	3.6 U	3.6 U	5.3	3.2	20	10
Barium	49.1 B	60.2 B	54.8 B	59.4 B	54.8 B	49.9	42.2	1,000	200
Beryllium	0.3 B	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	88,800		5,000
Chromium	0.7 U	0.7 U	2.7 B	2.5 B	2.7 B	0.8	0.8	11	10
Cobalt	—	—	—	—	—	—	0.4		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	2.2	5.1	25	25
Iron	86.6 B	6.4 B	4.9 U	11.9 B	4.9 U	14.1	14.1	7,000	100
Lead	1.3 U	1.3 U	1.3 U	1.3 R	1.3 U	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	24,700		5,000
Manganese	—	—	—	—	—	—	4.6		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	0.2	0.2
Nickel	0.5 U	0.7 B	1.7 B	0.5 U	1.7 B	0.7	0.7	96	40
Potassium	—	—	—	—	—	—	3,910		5,000
Selenium	4.0 U	4.0 UJ	4.0 UJ	4.0 R	4.0 UJ	4.4	4.4 R	8.5	5
Silver	4.1 B	0.5 U	3.3 B	0.5 U	3.3 B	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	34,000		5,000
Thallium	10.8 J	3.6 U	3.6 U	3.6 UJ	3.6 U	10.6	2.6	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	0.8 UJ	0.8 U	26.8	0.8 UJ	26.8	13.9	0.6 UJ	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	25.8		
Antimony	—	—	7.8 B	3.0 U	7.8 B	3.7	3.7		
Arsenic	—	—	3.6 U	3.6 U	3.6 U	2.9	2.9		
Barium	—	—	51.8 B	59.3 B	51.8 B	50.9	42.6		
Beryllium	—	—	0.1 U	0.1 U	0.1 U	0.1	0.1		
Cadmium	—	—	0.2 U	0.2 UJ	0.2 U	0.2	0.2		
Calcium	—	—	—	—	—	—	86,700		
Chromium	—	—	2.7 B	2.8 B	2.7 B	1.7	0.8		
Cobalt	—	—	—	—	—	—	0.4		
Copper	—	—	1.0 U	1.0 UJ	1.0 U	1.9	3.2		
Cyanide	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	3.0	3.0	10	10
Iron	—	—	10.0 B	74.8 B	10.0 B	49.5	83.8		
Lead	—	—	1.3 U	1.3 R	1.3 U	1.5	1.5		
Magnesium	—	—	—	—	—	—	23,900		
Manganese	—	—	—	—	—	—	6.5		
Mercury	—	—	0.1 U	0.1 U	0.1 U	0.1	0.1		
Nickel	—	—	1.1 B	0.5 U	1.1 B	0.7	0.7		
Potassium	—	—	—	—	—	—	3,820		
Selenium	—	—	4.0 U	4.0 R	4.0 U	4.4 UJ	4.4 R		
Silver	—	—	3.0 B	0.5 U	3.0 B	0.4	0.4		
Sodium	—	—	—	—	—	—	32,800		
Thallium	—	—	3.6 UJ	3.6 U	3.6 UJ	5.9 J	2.6		
Vanadium	—	—	—	—	—	—	0.8		
Zinc	—	—	12.7 B	7.8 J	12.7 B	9.7	0.6 UJ		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-52

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved)[13]									
Aluminum	—	—	—	—	—	—	25.8		200
Antimony	3.7 B	4.6 B	6.5 B	3.0 U	6.5 B	3.7	3.7	60	60
Arsenic	7.3 B	5.0 B	3.6 U	3.6 U	3.6 U	4.9	2.9	20	10
Barium	46.1 B	64.3 B	52.8 B	57.7 B	52.8 B	54.2	40.7	1,000	200
Beryllium	0.5 B	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	86,000		5,000
Chromium	0.7 U	0.8 B	2.8 B	3.5 B	2.8 B	2.1	0.8	11	10
Cobalt	—	—	—	—	—	—	0.4		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	2.3	3.7	25	25
Iron	81.7 B	4.9 U	4.9 U	575	4.9 U	14.1	14.1	7,000	100
Lead	1.3 U	1.3 U	1.3 U	1.3 R	1.3 U	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	23,500		5,000
Manganese	—	—	—	—	—	—	5.0		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	0.2	0.2
Nickel	0.5 U	0.5 U	1.2 B	1.5 B	1.2 B	1.1	0.7	96	40
Potassium	—	—	—	—	—	—	3,720		5,000
Selenium	4.0 U	4.0 UJ	4.0 UJ	4.0 R	4.0 UJ	4.4	4.4 R	8.5	5
Silver	3.6 B	0.5 U	3.5 B	0.5 U	3.5 B	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	32,900		5,000
Thallium	10.1 J	3.6 U	3.6 U	3.6 UJ	3.6 U	6.2 J	2.6	40	10
Vanadium	—	—	—	—	—	—	0.8		50
Zinc	2.6 J	0.8 U	15.8 B	0.8 UJ	15.8 B	26.5	1.5 J	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	25.8		
Antimony	—	—	5.9 B	3.0 U	5.9 B	3.7	3.7		
Arsenic	—	—	3.6 U	3.6 U	3.6 U	2.9	2.9		
Barium	—	—	53.2 B	58.4 B	53.2 B	54.4	41.2		
Beryllium	—	—	0.1 U	0.1 U	0.1 U	0.1	0.1		
Cadmium	—	—	0.2 U	0.2 UJ	0.2 U	0.2	0.2		
Calcium	—	—	—	—	—	—	84,800		
Chromium	—	—	3.7 B	2.4 B	3.7 B	1.5	0.8		
Cobalt	—	—	—	—	—	—	0.4		
Copper	—	—	1.0 U	1.0 UJ	1.0 U	1.7	3.3		
Cyanide	4.0 U	4.0 U	4.0 U	4.0 B	4.0 U	3.0	3.0	10	10
Iron	—	—	28.2 B	76.7 R	28.2 B	45.9	79.6		
Lead	—	—	1.3 U	1.3 R	1.3 U	1.5	1.5		
Magnesium	—	—	—	—	—	—	23,300		
Manganese	—	—	—	—	—	—	6.8		
Mercury	—	—	0.1 U	0.1 U	0.1 U	0.1	0.1		
Nickel	—	—	1.9 B	0.5 U	1.9 B	0.7	0.7		
Potassium	—	—	—	—	—	—	3,710		
Selenium	—	—	4.0 U	4.0 R	4.0 U	4.4 UJ	4.4 R		
Silver	—	—	3.3 B	0.5 U	3.3 B	0.4	0.4		
Sodium	—	—	—	—	—	—	32,800		
Thallium	—	—	3.6 UJ	3.6 U	3.6 UJ	6.0 J	2.6		
Vanadium	—	—	—	—	—	—	0.8		
Zinc	—	—	12.6 B	6.0 J	12.6 B	8.7	0.6 UJ		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-1

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	**June-02**	**September-02**	**December-02**	**February-03**	**May-03**	**August-03**	**November-03**	**TRIGGER LEVEL**	**CRQL**
Inorganics - Metals (Dissolved)[13]	Location is Dry			Location is Dry			Location is Dry		
Antimony	—	6.9 B	3.3 B	—	5.7 B	3.7	—	60	60
Arsenic	—	3.6 U	4.3 B	—	2.9 U	2.9	—	20	10
Barium	—	29.1 B	33.0 B	—	22.0 B	20.8	—	1,000	200
Beryllium	—	0.1 U	0.1 U	—	0.1 U	0.1	—	5	5
Cadmium	—	0.2 U	0.2 U	—	0.2 U	0.2	—	5	5
Chromium	—	0.7 U	2.1 B	—	2 B	0.8	—	11	10
Copper	—	2.5 B	2.4 B	—	9 B	5.1	—	25	25
Iron	—	1.3 U	4.9 U	—	14.1 U	14.1	—	7,000	100
Lead	—	0.1 U	1.3 U	—	1.5 UJ	1.5	—	4.2	3
Mercury	—	0.1 U	0.1 U	—	0.1 U	0.1	—	0.2	0.2
Nickel	—	2.6 B	1.7 B	—	1.3 B	1.5	—	96	40
Selenium	—	4.0 R	4.0 U	—	4.4 U	4.4	—	8.5	5
Silver	—	0.5 U	2.6 B	—	0.4 U	0.4	—	10	10
Thallium	—	3.6 U	3.6 U	—	2.6 UJ	2.6	—	40	10
Zinc	—	86.6 J	93.7	—	76.2	48.0 J	—	86	20
Inorganics - Metals and Cyanide (Total)									
Antimony	—	—	6.7 B	—	5.8 B	3.7	—		
Arsenic	—	—	7.2 B	—	2.9 U	2.9	—		
Barium	—	—	36.1 B	—	26.4 B	21.7	—		
Beryllium	—	—	0.1 U	—	0.1 U	0.1	—		
Cadmium	—	—	0.2 U	—	0.1 U	0.2	—		
Chromium	—	—	1.9 B	—	0.2 B	0.8	—		
Copper	—	—	6.3 B	—	3.6 B	24.0	—		
Cyanide	—	4.0 B	4.0 U	—	3.0 U	3.0	—	10	10
Iron	—	—	768	—	461	72.2	—		
Lead	—	—	1.3 U	—	1.5 UJ	1.5	—		
Mercury	—	—	0.1 U	—	0.1 U	0.1	—		
Nickel	—	—	3.7 B	—	1.3 B	1.4	—		
Selenium	—	—	4.0 U	—	4.4 U	4.4 UJ	—		
Silver	—	—	2.0 B	—	0.4 U	0.4	—		
Thallium	—	—	3.6 UJ	—	2.6 U	2.6 UJ	—		
Zinc	—	—	102	—	167	91.1 J	—		
Volatile Organic Compounds (VOCs)	—	BRL	BRL	—	BRL	BRL	—		
Semi-Volatile Organic Compounds (SVOCs)	—	BRL	BRL	—	BRL	BRL	—		
Pesticides / PCBs	—	BRL	BRL	—	BRL	BRL	—		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = No Sample Available (Well Dry)
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-2

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	**June-02**	**September-02**	**December-02**	**February-03**	**May-03**	**August-03**	**November-03**	**TRIGGER LEVEL**	**CRQL**
Inorganics - Metals (Dissolved)[13]	Location is Dry	Location is Dry	Location is Dry				Location is Dry		
Antimony	—	—	—	3.9 B	4.6 B	3.7	—	60	60
Arsenic	—	—	—	3.6 U	2.9 U	2.9	—	20	10
Barium	—	—	—	15.9 B	20.4 B	29.1	—	1,000	200
Beryllium	—	—	—	0.1 B	0.1 U	0.1	—	5	5
Cadmium	—	—	—	0.2 U	0.2 U	0.2	—	5	5
Chromium	—	—	—	0.7 U	2.4 B	0.8	—	11	10
Copper	—	—	—	2.3 B	5.0 B	1.2	—	25	25
Iron	—	—	—	4.9 U	14.1 U	14.1	—	7,000	100
Lead	—	—	—	1.3 U	1.5 UJ	1.5	—	4.2	3
Mercury	—	—	—	0.1 U	0.1 U	0.1	—	0.2	0.2
Nickel	—	—	—	1.8 B	2.8 B	2.3	—	96	40
Selenium	—	—	—	4.0 U	4.4 U	4.4	—	8.5	5
Silver	—	—	—	0.5 U	0.4 U	0.4	—	10	10
Thallium	—	—	—	7.1 B	2.6 U	2.6	—	40	10
Zinc	—	—	—	1.0 B	5.5 B	23.6 J	—	86	20
Inorganics - Metals and Cyanide (Total)									
Antimony	—	—	—	8.5 B	5.0 B	4.0	—		
Arsenic	—	—	—	3.6 U	2.9 U	2.9	—		
Barium	—	—	—	15.6 B	21.7 B	28.4	—		
Beryllium	—	—	—	0.1 U	0.1 U	0.1	—		
Cadmium	—	—	—	0.2 U	0.2 U	0.2	—		
Chromium	—	—	—	2.2 B	2.1 B	0.8	—		
Copper	—	—	—	10.9 B	2.8 B	11.7	—		
Cyanide	—	—	—	4.0 U	—	3.0	—	10	10
Iron	—	—	—	20.6 B	131	17.4	—		
Lead	—	—	—	1.3 U	1.5 UJ	1.5	—		
Mercury	—	—	—	0.1 U	0.1 U	0.1	—		
Nickel	—	—	—	2.8 B	2.6 B	2.4	—		
Selenium	—	—	—	4.0 UJ	4.4 U	4.4 UJ	—		
Silver	—	—	—	0.5 U	0.4 U	0.4	—		
Thallium	—	—	—	3.6 U	2.6 UJ	2.6 UJ	—		
Zinc	—	—	—	4.5 B	14.7 B	30.0 J	—		
Volatile Organic Compounds (VOCs)	—	—	—	—	—	BRL	—		
bis(2-Chloroethly) ether	—	—	—	—	—	10.0 U	—	13.6	10.0
Semi-Volatile Organic Compounds (SVOCs)	—	—	—	BRL	BRL	BRL	—		
Pesticides / PCBs	—	—	—	BRL	BRL	BRL	—		

Notes:

Laboratory Analytical data for July, August, and September of 2001 for SWD-2 is labeled as sample location "SWD-4" which was an alternate sample location in very close proximity to SWD-2 used when sample was not available

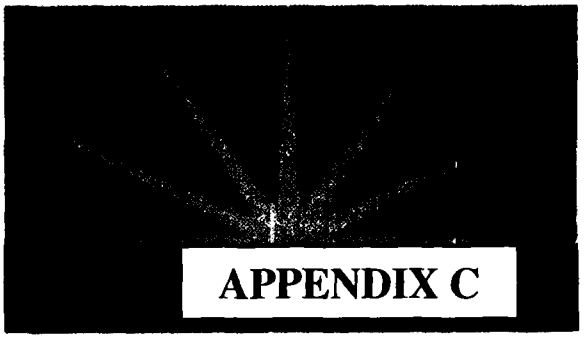
1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) *BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ*
6) — = No Sample Available (Well Dry)
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill
West Chester, Ohio
Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-3

	Sampling Event (All Results Expressed in Units of µg/l)								
	Baseline Results					Quarterly Results			
Compound	**June-02**	**September-02**	**December-02**	**February-03**	**May-03**	**August-03**	**November-03**	**TRIGGER LEVEL**	**CRQL**
Inorganics - Metals (Dissolved)[13]	Location is Dry								
Aluminum	—	—	—	—	—	—	98.7		200
Antimony	—	5.0 B	6.5 B	3.5 B	3.7 U	3.7	3.7	60	60
Arsenic	—	4.2 B	3.6 U	3.6 U	2.9 U	2.9	2.9	20	10
Barium	—	23.4 B	13.3 B	34.1 B	26.6 B	19.1	40.1	1,000	200
Beryllium	—	0.2 B	0.1 U	0.3 B	0.1 U	0.1	0.1	5	5
Cadmium	—	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.2	5	5
Calcium	—	—	—	—	—	—	130,000		5,000
Chromium	—	0.7 U	2.7 B	0.7 U	2.3 B	0.8	1.4	11	10
Cobalt	—	—	—	—	—	—	0.4		50
Copper	—	2.0 B	1.0 U	1.0 U	2.3 B	1.2	10.4	25	25
Iron	—	14.3 B	4.9 U	59.5 B	14.7 B	14.1	59.0	7,000	100
Lead	—	1.3 U	1.3 U	1.3 U	1.5 UJ	1.5	1.5	4.2	3
Magnesium	—	—	—	—	—	—	28,500		5,000
Manganese	—	—	—	—	—	—	10.9		15
Mercury	—	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1 UJ	0.2	0.2
Nickel	—	3.7 B	2.6 B	0.5 U	1.1 B	1.1	0.7	96	40
Potassium	—	—	—	—	—	—	3,870		5,000
Selenium	—	4.0 U	4.0 U	4.0 R	4.4 U	4.4	4.4	8.5	5
Silver	—	0.5 U	2.4 B	0.6 B	0.4 U	0.4	0.4	10	10
Sodium	—	—	—	—	—	—	11,100		5,000
Thallium	—	3.6 U	3.6 U	6.5 J	2.6 UJ	2.6	2.6	40	10
Vanadium	—	—	—	—	—	—	2.2		50
Zinc	—	6.7 B	14.9 B	3.2 B	2.2 B	19.0 J	91.6 J	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	—	—	—	—	—	—	177		
Antimony	—	—	6.5 B	4.0 B	4.1 B	3.7	3.7		
Arsenic	—	—	3.6 U	3.6 U	2.9 U	2.9	2.9		
Barium	—	—	24.3 B	41.8 B	37.7 B	29.0	37.0		
Beryllium	—	—	0.1 U	0.1 U	0.1 U	0.1	0.1		
Cadmium	—	—	0.2 U	0.2 U	0.2 U	0.2	0.2		
Calcium	—	—	—	—	—	—	12,100		
Chromium	—	—	5.0 B	6.4 B	4.2 B	0.8	1.0		
Cobalt	—	—	—	—	—	—	0.4		
Copper	—	—	4.4 B	8.8 B	6.0 B	8.6	14.8		
Cyanide	—	4.0 B	4.0 U	4.0 U	3.0 U	3.0	3.0	10	10
Iron	—	—	3,380	1,620	3,290	3,360	155		
Lead	—	—	1.3 U	1.4 B	1.5 UJ	1.5	1.5		
Magnesium	—	—	—	—	—	—	26,600		
Manganese	—	—	—	—	—	—	16.5		
Mercury	—	—	0.1 U	0.1 U	0.1 U	0.1	0.1 UJ		
Nickel	—	—	5.1 B	2.5 B	3.4 B	4.2	0.7		
Potassium	—	—	—	—	—	—	3,560		
Selenium	—	—	4.0 U	4.0 UJ	4.4 U	4.4 UJ	4.4		
Silver	—	—	2.6 B	0.5 U	0.4 U	0.4	0.4		
Sodium	—	—	—	—	—	—	10,300		
Thallium	—	—	3.6 UJ	3.6 U	2.6 UJ	2.6 UJ	2.6		
Vanadium	—	—	—	—	—	—	0.8		
Zinc	—	—	35.4	59.0	32.3	42.9 J	32.6 J		
Volatile Organic Compounds (VOCs)	—	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	—	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	—	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

1) All results expressed in micrograms per liter (µg/L).
2) Standard Inorganic Data Qualifiers have been used.
3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
6) — = Constituent not analyzed.
7) U = Not detected at the listed reporting limit.
8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
9) UJ = A value less than the CRQL but greater than the MDL.
10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
12) CRQL = Contract Required Quantitation Limit
13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



LABORATORY DATA VALIDATION REPORT

EarthTech
A Tyco International Ltd Company

DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 203111311

PROJECT MANAGER: Ron Rolker

Date: January 12, 2004

Data Validator: Mark Kromis

APPENDIX C
LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-08	SKGW07R1008 (DISS)
203111311-09	SKGW06R1008 (DISS)
203111311-10	SKGW591008 (DISS)
203111311-11	SKGW601008 (DISS)
203111311-12	SKGW62A1008 (DISS)
203111311-13	SKGW641008 (DISS)
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-18	SKGW581008 (DISS)
203111311-19	SKGW58FD1008 (DISS)
203111311-20	SKGWFB1008 (DISS)
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-26	SKGW611008 DUP
203111311-27	SKGW631008
203111311-28	SKGW241008
203111311-30	SKGW261008 (DISS)
203111311-31	SKGW301008 (DISS)
203111311-32	SKGW611008 (DISS)
203111311-33	SKGW611008 MS (DISS)
203111311-34	SKGW611008 DUP (DISS)
203111311-35	SKGW631008 (DISS)
203111311-36	SKGW241008 (DISS)

INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Calibration
   A. Initial Calibration (IC)

B. Continuing Calibration (CC)

3. Blanks

4. Inductively Coupled Plasma (ICP) Interference Check Sample

5. Laboratory Control Sample (LCS)

6. Duplicate Analysis

7. Spike Sample Analysis

8. ICP Serial Dilution

9. System Performance

10. Documentation

11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. DUPLICATE ANALYSIS

The RPD between the sample and duplicate were within the acceptance criteria for all target compounds.

7. SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSW611008 and SKSW611008 (Dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total fraction with the exception of Selenium (521%). The MS percent recoveries were within the acceptance criteria (75%-125%) in the dissolved fraction with the exception of Selenium (0%) and Thallium (74%). As per the National Functional Guidelines: if spike recovery results is greater than 30% but less than the lower acceptance limit then qualify the detected results for that analyte with "J" and non-detected results with "UJ". If the percent recovery is less than 10% then qualify detected results for that analyte with "J" and non-detected results with "R".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interferences exist due to matrix effects. The percent differences were within the acceptance criteria for all target analytes in the total and dissolved fractions.

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

The documentation appeared accurate and in order.

11. OVERALL ASSESSMENT

Barium, Copper, and Iron were detected in the Field Blank (Total) at a concentration of 0.7 B, 1.6 B and 30.8 B ppb respectively. Barium, Copper, and Nickel were detected in the Field Blank (Dissolved) at a concentration of 0.3 B, 1.5 B, and 0.7 B ppb respectively. It should be noted that the laboratory supplied the water used for the Field Blank. The results that are greater than the IDL but less than the CRDL are flagged with a ("B") qualifier by the laboratory.

The percent recoveries for Zinc in the Contract Required Detection Limit (CRDL) standards were 69.8%, 69.7%, 70.1%, and 70.9%. The detected Lead results were qualified with a "J" and the non-detected Lead results were qualified with "UJ".

There was no Selenium detected in the samples analyzed for total Selenium therefore the dissolved Selenium results that were flagged with and "R" can still be used for informational purposes.

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311
SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-07	SKGWTB1008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW611008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   - A. IC
   - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C + - 2°C.

2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV2. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 11/26/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes with the exception of 4-Chloroaniline. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of Naphthalene (30.1%), 2,4-Dinitrophenol (34.8%), Diethylphthalate (35.1%), Di-n-butylphthalate (47.4%), Di-n-octylphthalate (37.3%), and Caprolactam (35.8%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 8.4%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for Naphthalene and Caprolactam and the %RSD were recalculated. The recalculated %RSD was 28.1% and 9.0%, which are within the acceptance criteria of less than 30%. Naphthalene and Caprolactam results greater than 160 ppb were qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

Two CCs dated 11/26/03 and 12/1/03 were analyzed in support of the semivolatile sample analyses reported in the data submissions.

The RRF's for the CC dated 11/26/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 11/26/03 were within the acceptance criteria with the exception the %D for 2,4-Dintrophenol, Di-n-butylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

The RRF's for the CC dated 12/1/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 12/1/03 were within the acceptance criteria with the exception the %D for Naphthalene, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Di-n-butylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

4. BLANKS

One laboratory semivolatile method blank and one field blank were analyzed with this SDG. The results are summarized below.

Method Blank (MB 130795)

Di-n-butyl phthalate (0.859 ppb) was detected in the method blank extracted on 11/17/03. The results for Di-n-butyl phthalate less than 8.59 ppb were qualified with "U" for samples extracted with method blank 130795.

Bis (2-Ethylhexyl) phthalate (0.414 J ppb) was also detected in the method blank extracted on 11/17/03. The results for bis (2-Ethylhexyl) phthalate less than 4.14 ppb were qualified with "U" for samples extracted with method blank 130795.

Field Blank (SKGW00FB10065)

The presence of Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate detected in the field blank was mitigated because Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate were detected in the associated method blank.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits with the exception of Terphenyl-d14 (25%) associated with sample SKGW58FD1008. As per the National Functional Guidelines, no action is taken when one surrogate is greater than 10% and less than the acceptance limit.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol and Pentachlorophenol in the MS and 4-Nitrophenol in the MSD. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses.

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction analysis of the groundwater samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate were mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-07	SKGWTB1008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-17	SKGWTB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW611008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008
203111311-29	SKGWTB1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit.

However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   A. IC
   B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Laboratory Control Sample
8. Internal Standards Performance
9. Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. System Performance

12. Documentation

13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. Two bromofluorobenzene (BFB) tunes were run. The BFB tunes were acceptable.

3. CALIBRATION

A. Initial Calibration

Two ICs dated 11/17/03 and 11/18/03 were analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes.

The RRF's and the average RRF for the IC dated 11/17/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The RRF's and the average RRF for the IC dated 11/18/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

B. Continuing Calibration

Two CC's dated 11/17/03 and 11/18/03 were analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions.

The percent difference (% D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. The Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

Two laboratory volatile method blanks, a storage blank, three Trip Blanks, and a Field Blank were analyzed with this SDG. The results are summarized below.

Method Blanks

1117V2BLK01 (11/17/03)

Methylene chloride was detected at a concentration of 0.14 ppb in the method blank analyzed on 11/17/03.

1118V2BLK01 (11/18/03)

There were no target analytes detected in the method blank analyzed on 11/18/03.

Storage Blank (VHBLK01)

There were no target analytes detected in the storage blank.

Trip Blank (SKGWTB1008)

The Methylene chloride detected in the Trip Blank dated 11/12/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Trip Blank at a concentration of 335 ppb.

Trip Blank (SKGWTB1008)

Sulfur dioxide was detected at a concentration of 311 ppb in the Trip Blank dated 11/13/03.

Trip Blank (SKGWTB1008)

There were no target analytes detected in the Trip Blank dated 11/14/03.

Field Blank (SKGWFB1008)

Ethylbenzene (0.075 ppb), Methylene chloride (0.72 ppb), Toluene (0.88 ppb), and Xylenes (0.43 ppb) were detected in the Field Blank collected on 11/13/03. The Methylene chloride detected in the Field Blank collected on 11/13/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Field Blank at a concentration of 5.1 ppb.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was submitted for MS/MSD analysis. The percent recoveries and RDP between the MS/MSD were within the acceptance limits. A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

Two LCS were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. DOCUMENTATION

The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers. It should be noted that the field blank contained detectable quantities of petroleum related analytes although the constituents were not detected in any of the associated surface water samples, therefore no action was taken.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 203111311
PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW611008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3. IC
4. Calibration Verification
5. Blanks
6. Surrogate Spikes
7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
8. Pesticide Cleanup Checks
9. Target Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 130813

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 11/17/03.

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of gamma-BHC. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. *National Functional Guidelines for Inorganic Data Review.*

US EPA, 1999. *National Functional Guidelines for Organic Data Review.*

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/03/2003

GCAL Report 203111311

Part 1 of 2

Deliver To	Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300
Attn	Pat Higgins

Customer Earth Tech

Project Skinner Landfill

000001

CASE NARRATIVE

Client: Earth Tech **Report:** 20311131 1

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

SEMI-VOLATILES MASS SPECTROMETRY

Sample 20311131115 (SKGW58FD1008) had one surrogate outside of control limit in the base-neutral fraction.

In the semi-volatile analysis, 4-Nitrophenol was recovered above QC limits in the MS/MSD. Pentachlorophenol was above the QC limit in the MSD.

Samples 20311131115 (SKGW58FD1008) and 20311131128 (SKGW241008) have elevated detection limits due to insufficient sample volume.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the analysis of the MS/MSD, the spike recovery for gamma-GHC was below QC limits. This is attributed to matrix interference.

In the analysis of RESC01 (resolution check), Methoxychlor and Endosulfan Sulfate were not resolved on the confirmation column, however all compounds were resolved on the initial column.

METALS

In the ILM04.1 - CLP Metals analysis for prep batch 265574, the MS recovery was outside the control limits for Selenium. The LCS recovery was within control limits. This indicates the analysis is in control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0%.

In the ILM04.1 - CLP Metals analysis for prep batch 265576, the MS recovery was outside the control limits for Selenium and Thallium. The LCS recovery was within control limits. This indicates the analysis is in control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0% for Selenium and 45% for Thallium.

The MS recovery is not applicable for Iron for prep batch 265574 because the sample concentration is greater than four times the spike concentration.

MISCELLANEOUS

Samples 20311131104 (SKGW601008), 20311131105 (SKGW62A1008), 20311131112 (SKGW62A1008), 20311131121 (SKGW261008), 20311131122 (SKGW301008), 20311131126 (SKGW611008 DUP) and 20311131134 (SKGW611008 DUP (DISS)) had to be preserved at the laboratory with Nitric Acid.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reporduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

SCOTT A. BAILEY
OPERATIONS MANAGER
GCAL REPORT 203111311

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20311131101	SKGW07R1008	Water	11/12/2003 14:53	11/13/2003 09:30
20311131102	SKGW06R1008	Water	11/12/2003 15:25	11/13/2003 09:30
20311131103	SKGW591008	Water	11/12/2003 11:05	11/13/2003 09:30
20311131104	SKGW601008	Water	11/12/2003 11:28	11/13/2003 09:30
20311131105	SKGW62A1008	Water	11/12/2003 12:01	11/13/2003 09:30
20311131106	SKGW641008	Water	11/12/2003 12:40	11/13/2003 09:30
20311131107	SKGWTB1008	Water	11/12/2003 00:00	11/13/2003 09:30
20311131108	SKGW07R1008 (DISS)	Water	11/12/2003 14:53	11/13/2003 09:30
20311131109	SKGW06R1008 (DISS)	Water	11/12/2003 15:25	11/13/2003 09:30
20311131110	SKGW591008 (DISS)	Water	11/12/2003 11:05	11/13/2003 09:30
20311131111	SKGW601008 (DISS)	Water	11/12/2003 11:28	11/13/2003 09:30
20311131112	SKGW62A1008 (DISS)	Water	11/12/2003 12:01	11/13/2003 09:30
20311131113	SKGW641008 (DISS)	Water	11/12/2003 12:40	11/13/2003 09:30
20311131114	SKGW581008	Water	11/13/2003 15:10	11/14/2003 09:30
20311131115	SKGW58FD1008	Water	11/13/2003 15:20	11/14/2003 09:30
20311131116	SKGWFB1008	Water	11/13/2003 15:45	11/14/2003 09:30
20311131117	SKGWTB1008	Water	11/13/2003 00:00	11/14/2003 09:30
20311131118	SKGW581008 (DISS)	Water	11/13/2003 15:10	11/14/2003 09:30
20311131119	SKGW58FD1008 (DISS)	Water	11/13/2003 15:20	11/14/2003 09:30
20311131120	SKGWFB1008 (DISS)	Water	11/13/2003 15:45	11/14/2003 09:30
20311131121	SKGW261008	Water	11/14/2003 12:40	11/15/2003 12:05
20311131122	SKGW301008	Water	11/14/2003 10:15	11/15/2003 12:05
20311131123	SKGW611008	Water	11/14/2003 11:00	11/15/2003 12:05
20311131124	SKGW611008 MS	Water	11/14/2003 11:20	11/15/2003 12:05
20311131125	SKGW611008 MSD	Water	11/14/2003 11:35	11/15/2003 12:05
20311131126	SKGW611008 DUP	Water	11/14/2003 11:35	11/15/2003 12:05
20311131127	SKGW631008	Water	11/14/2003 12:20	11/15/2003 12:05
20311131128	SKGW241008	Water	11/14/2003 14:35	11/15/2003 12:05
20311131129	SKGWTB1008	Water	11/14/2003 00:00	11/15/2003 12:05
20311131130	SKGW261008 (DISS)	Water	11/14/2003 12:40	11/15/2003 12:05
20311131131	SKGW301008 (DISS)	Water	11/14/2003 10:15	11/15/2003 12:05
20311131132	SKGW611008 (DISS)	Water	11/14/2003 11:00	11/15/2003 12:05
20311131133	SKGW611008 MS (DISS)	Water	11/14/2003 11:20	11/15/2003 12:05
20311131134	SKGW611008 DUP (DISS)	Water	11/14/2003 11:35	11/15/2003 12:05
20311131135	SKGW631008 (DISS)	Water	11/14/2003 12:20	11/15/2003 12:05
20311131136	SKGW241008 (DISS)	Water	11/14/2003 14:35	11/15/2003 12:05

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGM07R1003

Lab Code: LA024 | Case No: | Contract:

Matrix: Water | SAS No: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 203111131101

Level: (low/med) | Lab File ID: 20311127/T0542

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1453

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1506

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

11/26/04 MK

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW07R1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131101

Level: (low/med) | Lab File ID: 2031117/T0542

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1453

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1506

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

SAMPLE NO.

SKGW07R1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131101

Sample wt/vol: Units: Lab File ID: 2031117/T0542

Level: (low/med) Date Collected: 11/12/03 Time: 1453

% Moisture: not dec. Date Received: 11/13/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 1506

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q	
1.	7446-09-5	Sulfur dioxide	1.464	15.3		M

11/20/03

FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW06R1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131102

Level: (low/med) | Lab File ID: 2031117/T0546

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1525

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1644

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

11/12/03 MSK

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW06R1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 203111131102

Level: (low/med) | Lab File ID: 2031117/T0546

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1525

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1644

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	0.11	J	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW06R1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131102

Sample wt/vol: Units: Lab File ID: 2031117/T0546

Level: (low/med) Date Collected: 11/12/03 Time: 1525

% Moisture: not dec. Date Received: 11/13/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 1644

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q	
1.	7446-09-5	Sulfur dioxide	1.547	3.24		u

1/12/04 MSC

Lab Name: GCAL | Sample ID: SKGW591008

Lab Code: LAC24 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131103

Level: (low/med) | Lab File ID: 2031117/T0547

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1105

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1709

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

11/21/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW591008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131103

Level: (low/med) | Lab File ID: 2031117/T0547

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1105

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1709

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW591008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131103

Sample wt/vol: Units: Lab File ID: 2031117/T0547

Level: (low/med) Date Collected: 11/12/03 Time: 1105

% Moisture: not dec. Date Received: 11/13/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 1709

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q	
1.	7446-09-5	Sulfur dioxide	3.745	2.08		u

11/21/04
MSR

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW601008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131104

Level: (low/med) | Lab File ID: 2031117/T0548

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1128

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1825

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0 ~~0.27~~	J	2.0	U
100-42-5	Styrene	1.0	U	1.0	

11/12/04 MSA

Lab Name: GCAL | Sample ID: SHGMW601005

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131104

Level: (low/med) | Lab File ID: 2031117/T0548

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1128

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1825

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW601008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131104

Sample wt/vol: Units: Lab File ID:

Level: (low/med) Date Collected: 11/12/03 Time: 1128

% Moisture: not dec. Date Received: 11/13/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 1825

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: *0*

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.		No tics detected			

Lab Name: GCAL | Sample ID: SKG.N62A1008

Lab Code: GA024 | Case No: | Contract:

Matrix: Water | SAS No: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131105

Level: (low/med) | Lab File ID: 203117/T0549

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1201

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1850

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	1.0 0.22	J	2.0	U
100-42-5	Styrene	1.0	U	1.0	

11/12 ISV MSV

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW62A1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131105

Level: (low/med) | Lab File ID: 2031117/T0549

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1201

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1850

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW62A1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131105

Sample wt/vol: Units: Lab File ID:

Level: (low/med) Date Collected: 11/12/03 Time: 1201

% Moisture: not dec. Date Received: 11/13/03

GC Column: DB-624-30M ID: 53 (mm) Date Analyzed: 11/17/03 Time: 1850

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.		No tics detected			

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW641008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131106

Level: (low/med) | Lab File ID: 2031117/T0550

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1240

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1914

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGJV541008

Lab Code: LAJ24 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131106

Level: (low/med) | Lab File ID: 2031117/T0550

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 1240

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1914

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW641008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131106

Sample wt/vol: Units: Lab File ID: 2031117/T0550

Level: (low/med) Date Collected: 11/12/03 Time: 1240

% Moisture: not dec. Date Received: 11/13/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 1914

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q	
1.	60-29-7	Ether	2.547	1.44		u

1/12/04 mse

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKG-MTB1008

Lab Code: LA024 | Case No: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131107

Level: (low/med) | Lab File ID: 2031117/T0541

% Moisture: not dec. | Date Collected: 11/12/03 | Time: 0000

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/13/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1442

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

Analytical Method: OLC02.1 - CLP Vo

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	1.0	J	2.0	UL
100-42-5	Styrene	1.0	U	1.0	

1 D CLS

Under

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: SKGWTB1008

Lab Code: LA024 Case No.:
Contract:

Matrix: Water
SAS No.: SDG No.: 203111311

Sample wt/vol: 25 Units: mL
Lab Sample ID: 20311131107

Level: (low/med)
Lab File ID: 2031117/T0541

% Moisture: not dec.
Date Collected: 11/12/03 Time: 0000

GC Column: DB-624-30M ID: .53 (mm)
Date Received: 11/13/03

Instrument ID: MSV2
Date Analyzed: 11/17/03 Time: 1442

Concentratedl Extract Volume: (µL)
Dilution Factor: 1 Analyst: RSP

Soil Aliquot Volume: (µL)
Prep Method:

CONCENTRATION UNITS: ug/L
Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO
SKGWTB1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131107

Sample wt/vol: Units: Lab File ID: 2031117/T0541

Level: (low/med) Date Collected: 11/12/03 Time: 0000

% Moisture: not dec. Date Received: 11/13/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 1442

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	7446-09-5	Sulfur dioxide	1.46	335	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW581008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131114

Level: (low/med) | Lab File ID: 2031117/T0552

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1510

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 2003

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0 0.29	J	2.0	u
100-42-5	Styrene	1.0	U	1.0	

11/21/03

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW[illegible]1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131114

Level: (low/med) | Lab File ID: 2031117/T0552

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1510

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 2003

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW581008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131114

Sample wt/vol: Units: Lab File ID:

Level: (low/med) Date Collected: 11/13/03 Time: 1510

% Moisture: not dec. Date Received: 11/14/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 2003

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS:

	CAS NO.	***COMPOUND***	***RT***	***EST. CONC.***	***Q***
1.		No tics detected			

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SYGW55FD1008

Lab Code: LA024 | Case No: | Contract:

Matrix: Water | SAS No: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131115

Level: (low/med) | Lab File ID: 2031117/T0553

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1520

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 2028

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

11/21/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW58FD1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131115

Level: (low/med) | Lab File ID: 2031117/T0553

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1520

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 2028

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

VOLATILE [illegible] ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW58FD1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131115

Sample wt/vol: Units Lab File ID:

Level: (low/med) Date Collected: 11/13/03 Time: 1520

% Moisture: not dec. Date Received: 11/14/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 2028

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS

	CAS NO.	*COMPOUND*	*RT*	*EST. CONC.*	*Q*
1.		No tics detected			

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGWFB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131116

Level: (low/med) | Lab File ID: 2031117/T0554

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1545

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 2053

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	0.075	J	1.0	
75-09-2	Methylene chloride	2.0 ~~0.72~~	J	2.0	U
100-42-5	Styrene	1.0	U	1.0	

11/20/03 MV

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SAGM-FB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131116

Level: (low/med) | Lab File ID: 2031117/T0554

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1545

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 2053

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	0.88	J	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	0.43	J	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGWFB1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131116

Sample wt/vol: Units: Lab File ID: 2031117/T0554

Level: (low/med) Date Collected: 11/13/03 Time: 1545

% Moisture: not dec. Date Received: 11/14/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 2053

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: *1*

CONCENTRATION UNITS:

	CAS NO.	*COMPOUND*	*RT*	*EST. CONC.*	*Q*	
1.	7446-09-5	Sulfur dioxide	2.511	5.1		U

11/26/04 MC

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGWTB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131117

Level: (low/med) | Lab File ID: 2031117/T0551

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 0000

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1939

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

11/21/03

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: SKGWTB1008

Lab Code: LA024 Case No.:
Contract:

Matrix: Water
SAS No.: SDG No.: 203111311

Sample wt/vol: 25 Units: mL
Lab Sample ID: 20311131117

Level: (low/med)
Lab File ID: 2031117/T0551

% Moisture: not dec.
Date Collected: 11/13/03 Time: 0000

GC Column: DB-624-30M ID: .53 (mm)
Date Received: 11/14/03

Instrument ID: MSV2
Date Analyzed: 11/17/03 Time: 1939

Concentratedl Extract Volume: (µL)
Dilution Factor: 1 Analyst: RSP

Soil Aliquot Volume: (µL)
Prep Method:

Analytical Method: OLC02.1 - CLP Vo

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGWTB1033

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131117

Sample wt/vol: Units: Lab File ID: 2031117/T0551

Level: (low/med) Date Collected: 11/13/03 Time: 0000

% Moisture: not dec. Date Received: 11/14/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 1939

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	7446-09-5	Sulfur dioxide	1.462	311	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW261008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131121

Level: (low/med) | Lab File ID: 2031118P/T0588

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 1240

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2310

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

1/12/04

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW261006

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131121

Level: (low/med) | Lab File ID: 2031118P/T0588

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 1240

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2310

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

Analytical Method: OLC02.1 - CLP Vo

CONCENTRATION UNITS: *ug/L*

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW261008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131121

Sample wt/vol: Units: Lab File ID:

Level: (low/med) Date Collected: 11/14/03 Time: 1240

% Moisture: not dec. Date Received: 11/15/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/18/03 Time: 2310

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS:

	CAS NO.	***COMPOUND***	***RT***	***EST. CONC.***	***Q***
1.		No tics detected			

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: 3CAL | Sample ID: SKGW303308

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131122

Level: (low/med) | Lab File ID: 2031118P/T0583

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 1015

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2109

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

Analytical Method: OLC02.1 - CLP Vo

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

11/18/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW301008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131122

Level: (low/med) | Lab File ID: 2031118P/T0583

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 1015

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2109

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW301006

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131122

Sample wt/vol: Units: Lab File ID: 2031118P/T0583

Level: (low/med) Date Collected: 11/14/03 Time: 1015

% Moisture: not dec. Date Received: 11/15/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/18/03 Time: 2109

Instrument ID: MSV2 Dilution Factor: 1 Analyst: HJL

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	7446-09-5	Sulfur dioxide	3.512	2.73	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW611008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131123

Level: (low/med) | Lab File ID: 2031118P/T0581

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 1100

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2021

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW611008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131123

Level: (low/med) | Lab File ID: 2031118P/T0581

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 1100

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2021

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

Analytical Method: OLC02.1 - CLP Vo

CONCENTRATION UNITS: *ug/L*

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW611008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131123

Sample wt/vol: Units: Lab File ID:

Level: (low/med) Date Collected: 11/14/03 Time: 1100

% Moisture: not dec. Date Received: 11/15/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/18/03 Time: 2021

Instrument ID: MSV2 Dilution Factor: 1 Analyst: HJL

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS:

	CAS NO.	***COMPOUND***	***RT***	***EST. CONC.***	***Q***
1.		No tics detected			

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW631006

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131127

Level: (low/med) | Lab File ID: 2031118P\T0587

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 1220

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2246

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

1/21/04

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW631008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131127

Level: (low/med) | Lab File ID: 2031118P/T0587

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 1220

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2246

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW531008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131127

Sample wt/vol: Units: Lab File ID:

Level: (low/med) Date Collected: 11/14/03 Time: 1220

% Moisture: not dec. Date Received: 11/15/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/18/03 Time: 2246

Instrument ID: MSV2 Dilution Factor: 1 Analyst: HJL

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS:

	CAS NO.	*COMPOUND*	*RT*	*EST. CONC.*	*Q*
1.		No tics detectec			

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW241008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131128

Level: (low/med) | Lab File ID: 2031118P/T0589

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 1435

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2334

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

11/20/03

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW241008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131128

Level: (low/med) | Lab File ID: 2031118P/TC589

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 1435

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2334

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGW241008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131128

Sample wt/vol: Units: Lab File ID:

Level: (low/med) Date Collected: 11/14/03 Time: 1435

% Moisture: not dec. Date Received: 11/15/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/18/03 Time: 2334

Instrument ID: MSV2 Dilution Factor: 1 Analyst: HJL

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS:

	CAS NO.	***COMPOUND***	***RT***	***EST. CONC.***	***Q***
1.		No tics detected			

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGWTB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131129

Level: (low/med) | Lab File ID: 2031118P/T0582

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 0000

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2045

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

11/20/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGWTB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311131129

Level: (low/med) | Lab File ID: 2031118P/T0582

% Moisture: not dec. | Date Collected: 11/14/03 | Time: 0000

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/15/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2045

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKGWTB1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: Water Lab Sample ID: 20311131129

Sample wt/vol: Units: Lab File ID:

Level: (low/med) Date Collected: 11/14/03 Time: 0000

% Moisture: not dec. Date Received: 11/15/03

GC Column: DB-624-30M ID: 53 (mm) Date Analyzed: 11/18/03 Time: 2045

Instrument ID: MSV2 Dilution Factor: 1 Analyst: HJL

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.		No tics detected			

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

SOW No.:

	EPA Sample No.	Lab Sample ID.
	SKGW07R1008	20311131101
	SKGW06R1008	20311131102
	SKGW591008	20311131103
	SKGW601008	20311131104
	SKGW62A1008	20311131105
	SKGW641008	20311131106
	SKGW07R1008 (DISS)	20311131108
	SKGW06R1008 (DISS)	20311131109
C.D	SKGW591008 (DISS)	20311131110
	SKGW601008 (DISS)	20311131111
	SKGW62A1008 (DISS)	20311131112
	SKGW641008 (DISS)	20311131113
	SKGW581008	20311131114
	SKGW58FD1008	20311131115
	SKGWFB1008	20311131116

Were ICP interelement corrections applied ? Yes / No YES

Were ICP background corrections applied ? Yes / No YES

If yes-were raw data generated before application of background corrections ? Yes / No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness for other than the conditions detailed above. Release of this data contained in this hardcopy data package and in the computer readable data submitted on the diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Shelley Bourgeois Name: Shelley Bourgeois

Date:: 12/12/03 Title: Inorganic Manager

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

SOW No.:

	EPA Sample No.	Lab Sample ID.
	SKGW581008 (DISS)	20311131118
	SKGW58FD1008 (DISS)	20311131119
	SKGWFB1008 (DISS)	20311131120
	SKGW261008	20311131121
	SKGW301008	20311131122
2	SKGW611008	20311131123
	SKGW611008 MS	20311131124
	SKGW611008 DUP	20311131126
	SKGW631008	20311131127
	SKGW241008	20311131128
	SKGW261008 (DISS)	20311131130
	SKGW301008 (DISS)	20311131131
9	SKGW611008 (DISS)	20311131132
	SKGW611008 MS (DISS)	20311131133
	SKGW611008 DUP (DISS)	20311131134

Were ICP interelement corrections applied ? Yes / No YES

Were ICP background corrections applied ? Yes / No YES

If yes-were raw data generated before application of background corrections ? Yes / No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness for other than the conditions detailed above. Release of this data contained in this hardcopy data package and in the computer readable data submitted on the diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Shelley Bourgeois Name: Shelley Bourgeois

Date: 12/12/03 Title: Inorganic Manager

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

SOW No.:

EPA Sample No.	*Lab Sample ID.*
SKGW631008 (DISS)	20311131135
SKGW241008 (DISS)	20311131136

Were ICP interelement corrections applied ?	Yes / No	YES
Were ICP background corrections applied ?	Yes / No	YES
If yes-were raw data generated before application of background corrections ?	Yes / No	NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness for other than the conditions detailed above. Release of this data contained in this hardcopy data package and in the computer readable data submitted on the diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Shelley Bourgeois Name: Shelley Bourgeois

Date:: 12/12/03 Title: Inorganic Manager

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKGW07R1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131101

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	5.3	B		P	
7440-39-3	Barium	204			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	4.9	B		P	
7440-50-8	Copper	10.0	B		P	
7439-89-6	Iron	9890			P	
7439-92-1	Lead	5.2			P	
7439-97-6	Mercury	0.1	J		AV	
7440-02-0	Nickel	10.5	B		P	
7782-49-2	Selenium	4.4	J	N	P	UJ
7440-22-4	Silver	0.4	J		P	
7440-28-0	Thallium	2.6	J		P	
7440-66-6	Zinc	22.7			P	J
57-12-5	Cyanide	3.0	U		AS	

11/13/04
MSM

Color Before: LT.BROWN Clarity Before: CLEAR Texture:

Color After: LT.BROWN Clarity After: CLEAR Artifacts:

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW06R1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131102

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	20.5			P	
7440-39-3	Barium	568			P	
7440-41-7	Beryllium	1.2	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	27.0			P	
7440-50-8	Copper	52.1			P	
7439-89-6	Iron	45400			P	
7439-92-1	Lead	46.0			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	41.2			P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	147			P	J
57-12-5	Cyanide	3.0	U		AS	

History mw

Color Before: LT.BROWN Clarity Before: CLEAR Texture:

Color After: LT.BROWN Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW591008

Lab Name: GCAL Contract:

Lab Code: LAC24 Case No.: SAS No.: SDG No.: 203111311

Matrix (soil / water): Water Lab Sample ID: 20311131103

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	J		P	
7440-38-2	Arsenic	4.3	B		P	
7440-39-3	Barium	213			P	
7440-41-7	Beryllium	0.1	J		P	
7440-43-9	Cadmium	0.2	J		P	
7440-47-3	Chromium	19.1			P	
7440-50-8	Copper	11.9	B		P	
7439-89-6	Iron	12900			P	
7439-92-1	Lead	10.0			P	
7439-97-6	Mercury	0.1	J		AV	
7440-02-0	Nickel	20.0	B		P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	36.3			P	J
57-12-5	Cyanide	3.0	U		AS	

Color Before: LT.YELLOW Clarity Before: CLEAR Texture:

Color After: LT.YELLOW Clarity After: CLEAR Artifacts:

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW601008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131104

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	11.7			P	
7440-39-3	Barium	89.8	B		P	
7440-41-7	Beryllium	0.9	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	33.2			P	
7440-50-8	Copper	29.3			P	
7439-89-6	Iron	31300			P	
7439-92-1	Lead	28.2			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	31.6	B		P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	135			P	J
57-12-5	Cyanide	3.0	U		AS	

Color Before: LT.BROWN Clarity Before: CLEAR Texture:

Color After: LT.BROWN Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW62A1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix (soil / water): Water Lab Sample ID: 20311131105

Level: (low / med): Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	17.7			P	
7440-39-3	Barium	533			P	
7440-41-7	Beryllium	1.5	B		P	
7440-43-9	Cadmium	1.1	B		P	
7440-47-3	Chromium	49.5			P	
7440-50-8	Copper	72.8			P	
7439-89-6	Iron	60800			P	
7439-92-1	Lead	72.8			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	64.3			P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	181			P	J
57-12-5	Cyanide	3.0	U		AS	

illegible

Color Before: DR.BROWN Clarity Before: CLEAR Texture:

Color After: DR.BROWN Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW641008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131106

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	10.8			P	
7440-39-3	Barium	95.9	B		P	
7440-41-7	Beryllium	1.0	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	29.4			P	
7440-50-8	Copper	16.3	B		P	
7439-89-6	Iron	42900			P	
7439-92-1	Lead	20.0			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	46.0			P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	114			P	J
57-12-5	Cyanide	3.0	U		AS	

11/13/04 mau

Color Before: LT.BROWN Clarity Before: CLEAR Texture:

Color After: LT.BROWN Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW07R1008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix (soil / water): Water Lab Sample ID: 203111311008

Level: (low / med): Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	J		P	
7440-38-2	Arsenic	4.5	B		P	
7440-39-3	Barium	131	B		P	
7440-41-7	Beryllium	0.1	J		P	
7440-43-9	Cadmium	0.2	J		P	
7440-47-3	Chromium	0.8	J		P	
7440-50-8	Copper	1.2	J		P	
7439-89-6	Iron	3580			P	
7439-92-1	Lead	1.5	J		P	
7439-97-6	Mercury	0.1	J		AV	
7440-02-0	Nickel	1.6	B		P	
7782-49-2	Selenium	4.4	J	N	P	R
7440-22-4	Silver	0.4	J		P	
7440-28-0	Thallium	2.5	J	N	P	UJ
7440-66-6	Zinc	30.7			P	J

11/25/03 mr

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW06R1008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131109

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	294			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	1.7	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	1.8	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-66-6	Zinc	0.6	U		P	UJ

History
nsc

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKGW591008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID 20311131110

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	6.5	B		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.7	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	4.0	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	2.3	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-66-6	Zinc	0.6	U		P	UJ

11/15/04 MSL

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW601008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131111

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	28.7	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	4.2	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-66-6	Zinc	0.6	U		P	UJ

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKGW62A1008 (DISS)

Lab Name: SCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131112

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	126	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	J		P	
7440-50-8	Copper	2.7	B		P	
7439-89-6	Iron	14.1	J		P	
7439-92-1	Lead	1.5	J		P	
7439-97-6	Mercury	0.1	J		AV	
7440-02-0	Nickel	0.9	B		P	
7782-49-2	Selenium	4.4	J	N	P	R
7440-22-4	Silver	0.4	J		P	
7440-28-0	Thallium	2.6	J	N	P	WS
7440-66-6	Zinc	0.9	B		P	WS

history
miss

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW641008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131113

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	44.6	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	3.4	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	5.2	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-66-6	Zinc	2.6	B		P	J

History mod

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW581008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131114

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	32.9			P	
7440-39-3	Barium	822			P	
7440-41-7	Beryllium	2.9	B		P	
7440-43-9	Cadmium	1.8	B		P	
7440-47-3	Chromium	112			P	
7440-50-8	Copper	139			P	
7439-89-6	Iron	129000			P	
7439-92-1	Lead	92.7			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	124			P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	1.6	B		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	367			P	J
57-12-5	Cyanide	3.0	U		AS	

history
psu

Color Before: DR.BROWN Clarity Before CLEAR Texture:

Color After: DR.BROWN Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW58FD1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131115

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	23.2			P	
7440-39-3	Barium	1000			P	
7440-41-7	Beryllium	1.0	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	60.2			P	
7440-50-8	Copper	57.9			P	
7439-89-6	Iron	74600			P	
7439-92-1	Lead	39.1			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	76.9			P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	0.5	B		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	172			P	J
57-12-5	Cyanide	3.0	U		AS	

11/25/03 msu

Color Before: DR.BROWN Clarity Before: CLEAR Texture:

Color After: DR.BROWN Clarity After: CLEAR Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGWFB008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix (soil / water): Water Lab Sample ID: 20311131116

Level: (low / med): Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	0.7	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	1.6	B		P	
7439-89-6	Iron	30.8	B		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	0.6	U		P	UJ
57-12-5	Cyanide	3.0	U		AS	

11/21/03 MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW581008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131118

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	6.0	B		P	
7440-39-3	Barium	228			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	1.2	U		P	
7439-89-6	Iron	2890			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	1.3	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-66-6	Zinc	0.6	U		P	UJ

11/25/04 MSa

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW58FD1008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LAC24 Case No.: SAS No.: SDG No.: 203111311

Matrix (soil / water): Water Lab Sample ID: 20311131119

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	5.2	B		P	
7440-38-2	Arsenic	8.0	B		P	
7440-39-3	Barium	278			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	2.0	B		P	
7439-89-6	Iron	704			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	3.6	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	WS
7440-66-6	Zinc	0.6	U		P	WS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I IN ILM04.1

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGWFB1008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131120

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	0.3	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	1.5	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-66-6	Zinc	0.6	U		P	UJ

11/19/04 MR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

SKGW261008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix (soil / water): Water Lab Sample ID: 20311131121

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	B		P	
7440-39-3	Barium	352			P	
7440-41-7	Beryllium	0.2	B		P	
7440-43-9	Cadmium	0.5	B		P	
7440-47-3	Chromium	20.6			P	
7440-50-8	Copper	20.1	B		P	
7439-89-6	Iron	10300			P	
7439-92-1	Lead	8.5			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	16.8	B		P	
7782-49-2	Selenium	4.4	U	N	P	WJ
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	J		P	
7440-66-6	Zinc	32.2			P	J
57-12-5	Cyanide	3.0	U		AS	

11/19/03 mm

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW301008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131122

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	318			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	B		P	
7440-47-3	Chromium	6.0	B		P	
7440-50-8	Copper	8.4	B		P	
7439-89-6	Iron	2090			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	4.5	B		P	
7782-49-2	Selenium	4.4	U	N	P	US
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	6.5	B		P	S
57-12-5	Cyanide	3.0	U		AS	

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKGW611008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix (soil / water): Water Lab Sample ID: 20311131123

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	3.7	B		P	
7440-39-3	Barium	91.3	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	2.1	B		P	
7440-50-8	Copper	4.2	B		P	
7439-89-6	Iron	8640			P	
7439-92-1	Lead	1.6	B		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	7.6	B		P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	13.8	B		P	J
57-12-5	Cyanide	3.0	U		AS	

11/15/04 mdl

Color Before: LT.YELLOW Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW611008 DUP

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131126

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	7.2	B		P	
7440-39-3	Barium	97.4	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	2.3	B		P	
7440-50-8	Copper	4.6	B		P	
7439-89-6	Iron	9270			P	
7439-92-1	Lead	1.8	B		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	7.6	B		P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	11.9	B		P	J
57-12-5	Cyanide	3.0	U		AS	

11/5/03 mm

Color Before: LT.YELLOW Clarity Before: CLEAR Texture:

Color After: LT.YELLOW Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW631008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 203111131127

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	J		P	
7440-38-2	Arsenic	9.3	B		P	
7440-39-3	Barium	147	B		P	
7440-41-7	Beryllium	0.6	B		P	
7440-43-9	Cadmium	0.2	J		P	
7440-47-3	Chromium	13.7			P	
7440-50-8	Copper	17.4	B		P	
7439-89-6	Iron	25800			P	
7439-92-1	Lead	23.4			P	
7439-97-6	Mercury	0.1	J		AV	
7440-02-0	Nickel	31.0	B		P	
7782-49-2	Selenium	4.4	J	N	P	UJ
7440-22-4	Silver	0.4	J		P	
7440-28-0	Thallium	2.6	J		P	
7440-66-6	Zinc	66.3			P	J
57-12-5	Cyanide	3.0	J		AS	

11/1/07 mc

Color Before: DR.BROWN Clarity Before: CLEAR Texture:

Color After: LT.BROWN Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW241008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131128

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	8.4	B		P	
7440-39-3	Barium	162	B		P	
7440-41-7	Beryllium	0.7	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	19.5			P	
7440-50-8	Copper	21.6	B		P	
7439-89-6	Iron	30500			P	
7439-92-1	Lead	20.8			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	28.2	B		P	
7782-49-2	Selenium	4.4	U	N	P	UJ
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	63.1			P	
57-12-5	Cyanide	3.0	U		AS	J

11/5/07 MSH

Color Before: LT.GRAY Clarity Before: CLEAR Texture:

Color After: LT.GRAY Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKGW26*008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131130

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	4.1	B		P	
7440-38-2	Arsenic	5.9	B		P	
7440-39-3	Barium	344			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	2.0	B		P	
7439-89-6	Iron	442			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	1.7	B		P	
7782-49-2	Selenium	4.4	U	N	P	UJ R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-66-6	Zinc	0.6	U		P	UJ

11/15/04 mr

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW301008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131131

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	334			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	5.4	B		P	
7439-89-6	Iron	427			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	US
7440-66-6	Zinc	0.6	U		P	US

11/20/04 mcl

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW61008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix (soil / water): Water Lab Sample ID: 20311131132

Level: (low / med): Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	7.5	B		P	
7440-39-3	Barium	83.3	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	1.2	U		P	
7439-89-6	Iron	5100			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	4.0	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-66-6	Zinc	4.8	B		P	J

11/15/04 mss

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW611008 DUP (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131134

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	4.1	B		P	
7440-39-3	Barium	82.5	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	1.2	U		P	
7439-89-6	Iron	5000			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	3.9	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-66-6	Zinc	1.5	B		P	J

11/18/04 ase

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKGW631008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix (soil / water): Water Lab Sample ID: 20311131135

Level: (low / med): Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	5.4	B		P	
7440-39-3	Barium	58.6	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	1.2	B		P	
7439-89-6	Iron	1150			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	6.9	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	W3 J
7440-66-6	Zinc	3.7	B		P	

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW241008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Matrix: (soil / water) Water Lab Sample ID: 20311131136

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	3.6	B		P	
7440-39-3	Barium	90.4	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	2.1	B		P	
7439-89-6	Iron	1000			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-66-6	Zinc	1.9	B		P	J

11/20/04 mw

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225 769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only

Client Name	Client #	Workorder #	Date
Earth Tech	4342	203111311	

Report to:

Client: Earth Tech
Address: 7321 Wine Street
Hebron Ky 41076
Contact: Pat Higgins
Phone: 859 342 2500
Fax: 859 342 2511

Bill to:

Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54280.01
Project Name/Number: Skinner Landfill 4th Qtr. 2003

Sampled By: Brad Logan & Pat Higgins

Matrix*	Date	Time (2400)	# of containers	Sample Description	Preservatives	No. Containers	Gross Alpha	Gross Beta	Radium 226	Radium 228	Total Uranium	Cyanide
W	11/12/03	1453	X	SK GW07R 1008	Various	7	X	X	X	X	X	X
W	11/12/03	1525	X	SK GW06R 1008	Various	7	X	X	X	X	X	X

Analytical Requests & Method

Lab use only:

Custody Seal
used ☑ yes ☐ no
in tact ☐ yes ☐ no
Temperature °C 6.0

Remarks:
Filter for total (TCL) and total (TAL) for the final O&M plus the list of analytes.

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Pat Higgins	FED EX	11/12/03	2000
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Fed Ex 8425 9530 8230	Dana Hayden	11-13-03	0930
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note:
Fed Ex Airbill
8425 9530 8230

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CHAIN OF CUSTODY RECORD

Lab use only	Client Name	Client #	Workorder #	Due Date
	Earth Tech	4342	203111311	11-27-03

Report to:
Client: Earth Tech
Address: 200 Vine Street
Wilder Ky 41076
Contact: Pat Higgins
Phone: 859 442 2300
Fax: 859 442 2311

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54280.01
Project Name/Number: ~~559~~ Skinner - Landfill 4th 2003
Sampled By: Derek Copas + Pat Higgins

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Semi Volatiles	Volatiles	PCB's	Pesticides	Total Metals	Dissolved Metals	Cyanide	Lab ID
W	11/12/03	11:05		X	SkGW-59 100%	Various	10	X	X	X	X	X	X	X	11113-03
W	11/12/03	11:25		X	SkGW-60 100%		10	X	X	X	X	X	X	X	-04
W	11/12/03	12:01		X	SkGW-62A 100%	HCl	3		X						-05
W	11/12/03	12:40		X	SkGW-64 100%		3		X						-06
W	11/12/03	14:53		X	SkGW-07R 100%		3		X						-01
W	11/14/03	15:25		X	SkGW-06R 100%		3		X						-02
W	11/14/03			X	SkGW-TB 100%		3		X						-07

Analytical Requests & Method

Lab use only:
Custody Seal used ☑ yes ☐ no
in tact ☑ yes ☐ no
Temperature °C 6

Remarks: (DISS) -10 -11

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Pat Higgins	FED EX	11/12/03	2000
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Fed Ex 8425 9530 8230	David Hall	11/13-03	0930
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note: Fed Ex Airbill #: 8425 9530 8230

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Matrix[1]: W = water, S = soil, SD = solid, L = liquid, SL = sludge, O = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to 225[illegible]5717

000797

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Phone 225.769.4900 • Fax 225.767 5717

CHAIN OF CUSTODY RECORD

Lab use only

Earth Tech — Client Name | 4342 — Client # | 203111311 — Workorder # | 11-27-03 — Due Date

Report to:
Client: Earth Tech
Address: 200 Ware Street
Wilder, KY 41076
Contact: Pat Higgins
Phone: 859 442 2300
Fax: 859 442 2300

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54280.01
Project Name/Number: Skinner Landfill 4th Qtr 2003
Sampled By: Brent Copas & Pat Higgins

Matrix*	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Semi Volatiles	Volatiles	PCB's	Pesticides	Total metals	dissolved metals	cyanide
W	11/12/03	12:01		X	SK GW-62A 1008	various	7	X		X	X	X	X	X
W	11/12/03	12:40		X	SK GW-64 1008	various	7	X		X	X	X	X	X

Analytical Requests & Method

Lab use only:
Custody Seal used ☐ yes ☐ no
in tact ☐ yes ☐ no
Temperature °C 5

Remarks:
Refer to table 1 7(TCL) and 13 table 9(total) of final order plan for list of analytes

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Pat Higgins	FED EX	11/14/03	2000
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
FED EX 8425 9530 8230	Diana Hook	11-13-03	0930
Relinquished: (Signature)	Received by: (Signature)	Date:	Time:

Note:
Fed Ex Air-bill #:
8425 9530 8230

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

862000

CHAIN OF CUSTODY RECORD

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Phone 225.769.4900 • Fax 225.767.5717

Lab use only	Client Name	Client #	Workorder #	Due Date
	Earth Tech	4347	203111311	11-28-03

Report to:
Client: Earth Tech
Address: 200 Vine Street
Wilder, Ky 41076
Contact: Pat Higgins
Phone: 859 442 2500
Fax: 859 442 2511

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54280.01
Project Name/Number: Skinner Landfill 4th Qtr. 2003
Sampled By: Pat Higgins and Derek Copas

Analytical Requests & Method

Lab use only:
Custody Seal used ☑ yes ☐ no
in tact ☑ yes ☐ no
Temperature °C 25

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Semi. Volatiles	Volatiles	PCB's	Pesticides	Total Metals	Dissolved Metals	Cyanide	Lab ID
W	11/13	1510		X	SKGW58 1108		7	X		X	X	X	X	X	11113
W	11/13	1520		X	SKGW58FD1108		7	X		X	X	X	X	X	11114

Remarks: (DISS)
Refer to table 7-8-14 (TCL) and tables 8-1-15 (TAL) of the final O&M plan for list of analytes

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Derek Copas			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Fed Ex 842595308310	Laura Hurd	11/14/03	0930
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note: Fed Ex 8425 9530 9310

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[1] Matrix: W = water, S = soil, SD = solid, L = liquid, SL = sludge, O = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (225) 767-5717

662000

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CHAIN OF CUSTODY RECORD

Lab use only: Client Name: Earth Tech | Client #: 4342 | Workorder #: 20311311

Report to:
Client: Earth Tech
Address: 200 Vine Street, Wilder Ky 41076
Contact: Pat Higgins
Phone: 859 442 2300
Fax: 859 442 2511

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54230.01
Project Name/Number: Skinner Landfill 4th Qtr 2003
Sampled By: Derek Capps & Pat Higgins

Lab use only:
Custody Seal used: ☑ yes ☐ no
in tact: ☑ yes ☐ no
Temperature °C: 5

Analytical Requests & Method: Semi Volatiles, Volatiles, PCBs, Pesticides, total metals, dissolved metals, cyanide

Matrix	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No. Containers	Semi Volatiles	Volatiles	PCBs	Pesticides	total metals	dissolved metals	cyanide
W	11/13	1545		X	SKGWFB 1008		10	X	X	X	X	X	X	X
W	11/03	11:15		X	SKSW51 1008		3		X					
W	11/13	11:22		X	SKSW51MS 1008		3		X					
W	11/13	11:40		X	SKSW51MSD 1008		3		X					
W	11/13	11:55		X	SKSW52 1008		3		X					
W	11/13	12:12		X	SKSW53 1008		3		X					
W	11/13	1510		X	SKGW58 1008		3		X					
W	11/13	15:20		X	SKGW58FD 1008		3		X					
W	11/13	—		X	SKGWTB 1008		3		X					
W	11/13	1245		X	SKSWFB		3		X					

Remarks: Refer to Table 7 (TCL) and Table 8 (TAL) of final O&M plan for list of analytes

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☐ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Derek Capps 11/13/03 5:00			
Fed Ex 842595308310	Dana [illegible]	11-14-03	0930

Note: Fed Ex 8425 9530 8310
*Samples are in separate work order

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CHAIN OF CUSTODY RECORD

Lab use only	Earth Tech	4342	203111311	12-01-03
	Client Name	Client #	Workorder #	Due Date

Report to:
Client: Earth Tech
Address: 200 Vine Street
Miller Ky 41076
Contact: Pat Higgins
Phone: 859 442 2300
Fax: 859 442 2311

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54880.01
Project Name/Number: Stinger Landfill 4th Qtr. 2005
Sampled By: Derek Copas & Pat Higgins

Analytical Requests & Method

Lab use only:
Custody Seal used ☐ yes ☐ no
in tact ☐ yes ☐ no
Temperature °C 6

Matrix[1]	Date (1)	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Semi Volatiles	Volatiles	PCBs	Pesticides	Total metals	Dissolved metals	Cyanide	Lab ID
W	11/14	12:40		X	SKGW 26 1008		7	X	X	X	X	X	X	X	11/13 -21
W	11/14	10:15		X	SKGW 30 1008		7	X	X	X	X	X	X	X	-22

Remarks: Refer to table 30 (DISS) 7(tcl) and 31 table 8 (tal) of the final O&M plan for list of analytes

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Derek Copas	Don Smith	11-15-03	1040
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Don Smith	Cooler	11-15-03	1205
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Cooler	David Tuple	11-17-03	0800

Note: Fed Ex # 842595308321

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Matrix: W = water, S = soil, SD = solid, L = liquid, SL = sludge, O = oil, CT = charcoal tube, A = air bag

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000801

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CHAIN OF CUSTODY RECORD

Lab use only

Client Name	Client #	Workorder #	Due Date
Earth Tech	4347	20311311	[illegible]

Report to:
Client: Earth Tech
Address: 200 Vine Street
Wilder, Ky 41076
Contact: Pat Higgins
Phone: 859 442 2300
Fax: 859 442 2311

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54280.01
Project Name/Number: Skinner Landfill 4th Qtr. 2003
Sampled By: Derek Copas & Pat Higgins

Analytical Requests & Method: Semi Volatiles; Volatiles; PCBs; Pesticides; Total metals; Dissolved metals; Cyanide

Matrix	Date	Time (2400)	C	G	Sample Description	Preservatives	No. Containers	Semi Volatiles	Volatiles	PCBs	Pesticides	Total metals	Dissolved metals	Cyanide
W	11/14	11:00		X	SKGWG1 1003		7	X		X	X	X	X	X
W	11/14	11:20		X	SKGWG1MS1003		7	X		X	X	X	X	X

Lab use only:
Custody Seal used ☐ yes [ ] no
in tact ☐ yes [ ] no
Temperature °C 6

Remarks: Refer to table 7-3 (1-1) and table 8 (1-1) of the final QAPP plan for list of analytes
11 13 ... -3 ... -11

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Derek L. Copas	Don [illegible]	11-15-03	1040
Don [illegible]	[illegible]	11-15-03	1205
[illegible]	David [illegible]	11-17-03	[illegible]

Note: Fed Ex 8425 9530 8321

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

203000

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only	Client Name	Client #	Workorder #	Due Date
	Earth Tech	4342-	203111311	11-01-03

Report to:
Client: Earth Tech
Address: 200 Vine Street
Wilder, Ky 41076
Contact: Pat Higgins
Phone: 859 442 2300
Fax: 859 442 2311

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54280.01
Project Name/Number: Skinner Landfill 4th Qtr 2003
Sampled By: Derek Copas & Pat Higgins

Analytical Requests & Method: Semi-Volatiles; Volatiles; PCB's; Pesticides; Total Metals; Dissolved metals; Cyanide

Lab use only:
Custody Seal used ☐ yes ☐ no
in tact ☐ yes ☐ no
Temperature °C 6

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Lab ID
W	11/13	11:35		X	SKGW61MSD 1008		7	11/13 -25,26
W	11/14	12:20		X	SKGW631005		7	-27

Remarks: (Diss) Refer to table 7.1-1 (tot) and table 3.5-1 (tot) of the Final O&M plan for list of analytes

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Derek Copas	Dm Pmlnl	11-15-03	1040
Dm Pmlnl	Coller	11-15-03	1205
Coller	Dana Hyde	11/7/03	0800

Note: Fed Ex 8425 9530 8321

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix: W = water, S = soil, SD = solid, L = liquid, SL = sludge, O = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (225) 767-5717

000803

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only

Client Name	Client #	Workorder #	Due Date
Earth Tec	4342	2031/1211	12-1-03

Report to:
Client: Earth Tech
Address: 200 Vine Street
Wilder, Ky 41076
Contact: Pat Higgins
Phone: 859 442 2300
Fax: 859 442 2311

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54280
Project Name/Number: Skinner Landfill 4th Qtr
Sampled By: D Cooper

Lab use only:
Custody Seal
used ☐ yes ☐ no
in tact ☐ yes ☐ no
Temperature °C 6

Analytical Requests & Method: Semi Volatiles, Volatiles, PCBs, Pesticides, Total metal, Dissolved metal, Cyanide

Matrix	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Semi Volatiles	Volatiles	PCBs	Pesticides	Total metal	Dissolved metal	Cyanide
W	11/14	14:35		X	SKGW24 1008		10	X	X	X	X	X	X	X
W	11/14	11:00		X	SKGW61 1008		3		X					
W	11/14	11:20		X	SKGW61MS 1008		3		X					
W	11/14	11:35		X	SKGW61MSD 1008		3		X					
W	11/14	12:40		X	SKGW26 1008		3		X					
W	11/14	10:15		X	SKGW30 1008		3		X					
W	11/14	12:20		X	SKGW63 1008		3		X					
W	11/14			X	SKGWTB 1008		3		X					

Remarks: (Diss) Refer to table 7 (TCL) and table 8 (tal) of the final C&M Plan for list of analytes

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
David Cooper	Don Pointland	11-15-03	1040
Don Pointland	Cooll	11-15-03	1205
		11/17/03	

Note: Fed Ex 8475 9530 8321

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

000804

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW07R1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131101 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1453

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1638

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UI
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	10.0 0.898	J	10.0	CL

11/13/04 mz

SEMIVOLATILE ORGANICS DATA SHEET

Lab Name: GCAL | Sample ID: SKGM07R1308

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131101 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1453

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: 25 (mm) | Date Analyzed: 11/26/03 | Time: 1638

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0
85-68-7	Butylbenzylphthalate	10.0	J	10.0
86-74-8	Carbazole	10.0	U	10.0
218-01-9	Chrysene	10.0	U	10.0
84-74-2	Di-n-butylphthalate	~~0.859~~	J	10.0
117-84-0	Di-n-octylphthalate	10.0	U	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0
132-64-9	Dibenzofuran	10.0	U	10.0
84-66-2	Diethylphthalate	10.0	U	10.0
131-11-3	Dimethyl-phthalate	10.0	U	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	10.0
206-44-0	Fluoranthene	10.0	U	10.0
86-73-7	Fluorene	10.0	U	10.0
118-74-1	Hexachlorobenzene	10.0	U	10.0
87-68-3	Hexachlorobutadiene	10.0	U	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0
67-72-1	Hexachloroethane	10.0	U	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0
78-59-1	Isophorone	10.0	U	10.0
91-20-3	Naphthalene	10.0	U	10.0
100-01-6	4-Nitroaniline	25.0	U	25.0
98-95-3	Nitrobenzene	10.0	U	10.0
100-02-7	4-Nitrophenol	25.0	U	25.0
87-86-5	Pentachlorophenol	25.0	U	25.0
85-01-8	Phenanthrene	10.0	U	10.0
108-95-2	Phenol	10.0	U	10.0
129-00-0	Pyrene	10.0	U	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0
95-48-7	o-Cresol	10.0	U	10.0

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11/13/03

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL

Lab Code: LA024 2 Case No.:

SAS No.: SDG No.: 203111311

Matrix: Water

Sample wt/vol: Units:

Level: (low/med)

% Moisture: not dec.

GC Column: DB-5MS-30M ID: .25 (mm)

Concentrated Extract Volume: (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH:

Sample ID: SKGW07R1008

Contract:

Lab File ID: 2031126/S4178

Lab Sample ID: 20311131101

Date Collected: 11/12/03 Time: 1453

Date Received: 11/13/03

Date Extracted:

Date Analyzed: 11/26/03 Time: 1638

Dilution Factor: 1 Analyst: RLW

Prep Method:

Analytical Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found : 2

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	301-02-0	9-Octadecenamide, (Z)-	12.603	18	
2.	301-02-0	9-Octadecenamide, (Z)-	14.207	42.7	

SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample No.: SKGW06R1008

Lab Code: LAC24 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131102 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1525

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1705

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	0.656	J	10.0	LL

11/13/03

FORM SV-1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW06R1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131102 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1525

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1705

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	10.c~~0.866~~	J	10.0	UJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	UJ
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-dl-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

11/13/04

SEMIVOLATILE ORGANICS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL
Lab Code: LA024 2 Case No.:
SAS No.: SDG No.: 203111311
Matrix: Water
Sample wt/vol: Units
Level: (low/med)
% Moisture: not dec.
GC Column: DB-5MS-30M ID: .25 (mm)
Concentrated Extract Volume: (µL)
Injection Volume: 1.0 (µL)
GPC Cleanup: (Y/N) N pH:

Sample ID: SB-GW06R1008
Contract:
Lab File ID: 2031126/S4179
Lab Sample ID: 203111131102
Date Collected: 11/12/03 Time: 1525
Date Received: 11/13/03
Date Extracted:
Date Analyzed: 11/26/03 Time: 1705
Dilution Factor: 1 Analyst: RLW
Prep Method:
Analytical Method: SW-846 8270C
Instrument ID: MSSV2

Number TICs Found: 2

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	301-02-0	9-Octadecenamide, (Z)-	12.579	20.2	
2.	301-02-0	9-Octadecenamide, (Z)-	14.194	50.2	

FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW591008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131103 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1105

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1732

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	10.C 147	J	10.0	UL

11/13/03 MG

NEW SOIL / SEDIMENT ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW591008

Lab Code: UA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131103 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1105

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: 25 (mm) | Date Analyzed: 11/26/03 | Time: 1732

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	10.0	U	10.0	UJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	UJ
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

11/25/04 MK

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL
Lab Code: LA024 2 Case No.:
SAS No.: SDG No.: 203111311
Matrix: Water
Sample wt/vol: Units:
Level: (low/med)
% Moisture: not dec.
GC Column: DB-5MS-30M ID: .25 (mm)
Concentrated Extract Volume: (µL)
Injection Volume: 1.0 (µL)
GPC Cleanup: (Y/N) N pH:

Sample ID: SKGW591008
Contract:
Lab File ID: 2031126/S4180
Lab Sample ID: 20311131103
Date Collected: 11/12/03 Time: 1105
Date Received: 11/13/03
Date Extracted:
Date Analyzed: 11/26/03 Time: 1732
Dilution Factor: 1 Analyst: RLW
Prep Method:
Analytical Method: SW-846 8270C
Instrument ID: MSSV2

Number TICs Found : 2

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	115-28-6	Bicyclo[2.2.1]hept-5-ene-2,3-d	11.105	123	
2.	301-02-0	9-Octadecenamide, (Z)-	14.182	12	

SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW031008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131104 | Lab File ID: 2031201/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1128

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: 25 (mm) | Date Analyzed: 12/01/03 | Time: 1455

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl) ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl) phthalate	1.3	J	10.0	U

11/13/04 mc

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW601008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131104 | Lab File ID: 2031201/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1128

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/01/03 | Time: 1455

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	~~10.0~~ 0.803	J	10.0	UJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	UJ
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	UJ more
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	UJ
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	UJ
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

1/13/04 mse

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL | Sample ID: SKGMV601008

Lab Code: LA024 2 | Case No.: | Contract:

SAS No.: | SDG No.: 203111311 | Lab File ID: 2031201/S4196

Matrix: Water | Lab Sample ID: 20311131104

Sample wt/vol: | Units | Date Collected: 11/12/03 | Time: 1128

Level: (low/med) | Date Received: 11/13/03

% Moisture: not dec. | Date Extracted:

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/01/03 | Time: 1455

Concentrated Extract Volume: | (µL) | Dilution Factor: 1 | Analyst: RLW

Injection Volume: 1.0 | (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	301-02-0	9-Octadecenamide, (Z)-	14.183	33.3	

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW62A1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131105 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1201

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1825

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	WS
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	~~10.0~~ 2.47	J	10.0	U

11/13/04 MSV

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW62A1308

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131105 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1201

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1825

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0
85-68-7	Butylbenzylphthalate	10.0	U	10.0
86-74-8	Carbazole	10.0	U	10.0
218-01-9	Chrysene	10.0	U	10.0
84-74-2	Di-n-butylphthalate	~~10.0~~ 1.02	J	10.0
117-84-0	Di-n-octylphthalate	10.0	U	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0
132-64-9	Dibenzofuran	10.0	U	10.0
84-66-2	Diethylphthalate	10.0	U	10.0
131-11-3	Dimethyl-phthalate	10.0	U	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	10.0
206-44-0	Fluoranthene	10.0	U	10.0
86-73-7	Fluorene	10.0	U	10.0
118-74-1	Hexachlorobenzene	10.0	U	10.0
87-68-3	Hexachlorobutadiene	10.0	U	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0
67-72-1	Hexachloroethane	10.0	U	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0
78-59-1	Isophorone	10.0	U	10.0
91-20-3	Naphthalene	10.0	U	10.0
100-01-6	4-Nitroaniline	25.0	U	25.0
98-95-3	Nitrobenzene	10.0	U	10.0
100-02-7	4-Nitrophenol	25.0	U	25.0
87-86-5	Pentachlorophenol	25.0	U	25.0
85-01-8	Phenanthrene	10.0	U	10.0
108-95-2	Phenol	10.0	U	10.0
129-00-0	Pyrene	10.0	U	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0
95-48-7	o-Cresol	10.0	U	10.0

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UJ

11/13/03 mk

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL
Lab Code: LA024 2 Case No.:
SAS No.: SDG No.: 203111311
Matrix: Water
Sample wt/vol: Units:
Level: (low/med)
% Moisture: not dec.
GC Column: DB-5MS-30M ID: .25 (mm)
Concentrated Extract Volume: (µL)
Injection Volume: 1.0 (µL)
GPC Cleanup: (Y/N) N pH:

Sample ID: SKGW62A1008
Contract:
Lab File ID: 2031126/S4182
Lab Sample ID: 20311131105
Date Collected: 11/12/03 Time: 1201
Date Received: 11/13/03
Date Extracted:
Date Analyzed: 11/26/03 Time: 1825
Dilution Factor: 1 Analyst: RLW
Prep Method:
Analytical Method: SW-846 8270C
Instrument ID: MSSV2

Number TICs Found : 3

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.		Unknown	12.426	178	
2.	85-60-9	Phenol, 4,4'-butylidenebis[2-(	13.864	13.2	
3.	301-02-0	9-Octadecenamide, (Z)-	14.196	42	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL		**Sample ID:** SKGW641308	
Lab Code: LA024	**Case No.:**	**Contract:**	
Matrix: Water		**SAS No.:**	**SDG No.:** 203111311
Sample wt/vol: 1000	**Units:** mL	**Lab Sample ID:** 20311131106	**Lab File ID:** 2031126/S
Level: (low/med)		**Date Collected:** 11/12/03	**Time:** 1240
% Moisture:	**decanted: (Y/N)**	**Date Received:** 11/13/03	
GC Column: DB-5MS-30M	**ID:** .25 (mm)	**Date Analyzed:** 11/26/03	**Time:** 1852
Concentrated Sample Volume: 1000	(µL)	**Dilution Factor:** 1	**Analyst:** RLW
Soil Aliquot Volume:	(µL)	**Prep Method:**	
Injection Volume: 2	(µL)	**Analytical Method:** OLMO 4.2	
GPC Cleanup: (Y/N) N	**pH:**	**Instrument ID:** MSSV2	

CONCENTRATION UNITS: *ug/L*

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	1.22	J	10.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW641008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131106 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/12/03 | Time: 1240

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1852

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	~~10.0~~ 7.39	J	10.0	UJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	UJ
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

11/13/04 MS

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL
Lab Code: LA024 2 Case No.:
SAS No.: SDG No.: 20311131[illegible]
Matrix: Water
Sample wt/vol: Units:
Level: (low/med)
% Moisture: not dec.
GC Column: DB-5MS-30M ID: .25 (mm)
Concentrated Extract Volume: (µL)
Injection Volume: 1.0 (µL)
GPC Cleanup: (Y/N) N pH:

Sample ID: SKGW64[illegible]008
Contract:
Lab File ID: 2031126/S4183
Lab Sample ID: 20311131106
Date Collected: 11/12/03 Time: 1240
Date Received: 11/13/03
Date Extracted:
Date Analyzed: 11/26/03 Time: 1852
Dilution Factor: 1 Analyst: RLW
Prep Method:
Analytical Method: SW-846 8270C
Instrument ID: MSSV2

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	124-26-5	Octadecanamide	14.95	44.7	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW581008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131114 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1510

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1919

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	10.0 ~~1.89~~	J	10.0	EL

1/13/04 MG

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW5E1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131114 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1510

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1919

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	5.13	J	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	10.00755	J	10.0	UJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	UJ
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

11/3/04 mk

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL
Sample ID: SKGW581008

Lab Code: LA024 2 Case No.:
Contract:

SAS No.: SDG No.: 203111311
Lab File ID: 2031126/S4184

Matrix: Water
Lab Sample ID: 20311131114

Sample wt/vol: Units:
Date Collected: 11/13/03 Time: 1510

Level: (low/med)
Date Received: 11/14/03

% Moisture: not dec.
Date Extracted:

GC Column: DB-5MS-30M ID: .25 (mm)
Date Analyzed: 11/26/03 Time: 1919

Concentrated Extract Volume: (µL)
Dilution Factor: 1 Analyst: RLW

Injection Volume: 1.0 (µL)
Prep Method:

GPC Cleanup: (Y/N) N pH:
Analytical Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found : 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	301-02-0	9-Octadecenamide, (Z)-	14.197	36.4	

FORM I SV-TIC

Gulf Coast Analytical Laboratories, Inc.

BNA QUANT AND RATIO REPORT

Data file : /var/chem/mssv2.i/2031126.s.b/s4184.d
Lab Smp Id: 20311131114 Client Smp ID: SKGW581008
Inj Date : 26-NOV-2003 19:19
Operator : rlw Inst ID: mssv2.i
Smp Info : 20311131114*ET*88270
Misc Info : 20311131114*MSSV*1954*111311*1000-1.0
Comment :
Method : /var/chem/mssv2.i/2031126.s.b/CLP4.2_02.m.m
Meth Date : 02-Dec-2003 14:45 rlw Quant Type: ISTD
Cal Date : 26-NOV-2003 11:05 Cal File: s4166.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppm)	CONCENTRATIONS FINAL (ug/L)
$ 1 2-Fluorophenol	112	3.861	3.849	1.779	2625015	124.031	62.0
$ 3 Phenol-d5	99	4.657	4.645	1.940	2993213	117.986	59.0
$ 6 2-Chlorophenol-d4	132	4.764	4.764	1.962	2922409	121.128	60.6
* 8 1,4-Dichlorobenzene-d4	115	4.954	4.954	1.000	359202	40.0000	
$ 9 1,2-Dichlorobenzene-d4	152	5.138	5.096	1.031	933601	67.4370	33.7
$ 16 Nitrobenzene-d5	82	5.512	5.501	1.885	1716307	84.5401	42.3
* 23 Naphthalene-d8	136	6.225	6.225	1.000	2455689	40.0000	
$ 33 2-Fluorobiphenyl	172	7.449	7.437	1.903	2754636	88.8657	44.4
* 41 Acenaphthene-d10	164	8.245	8.245	1.000	1017099	40.0000	
$ 53 2,4,6-Tribromophenol	332	9.219	9.207	1.118	420777	155.206	77.6
* 58 Phenanthrene-d10	188	10.039	10.039	1.000	1461629	40.0000	
62 Di-n-butylphthalate	149	10.752	10.752	1.071	73568	1.52948	0.765(a)
$ 65 Terphenyl-d14	244	11.987	11.976	1.903	1085337	45.1930	22.6

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW58FD1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 910 | Units: mL | Lab Sample ID: 20311131115 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1520

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1947

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	11.0	U	11.0	
88-06-2	2,4,6-Trichlorophenol	11.0	U	11.0	
120-83-2	2,4-Dichlorophenol	11.0	U	11.0	
51-28-5	2,4-Dinitrophenol	27.5	U	27.5	ij
121-14-2	2,4-Dinitrotoluene	11.0	U	11.0	
606-20-2	2,6-Dinitrotoluene	11.0	U	11.0	
91-58-7	2-Chloronaphthalene	11.0	U	11.0	
95-57-8	2-Chlorophenol	11.0	U	11.0	
91-57-6	2-Methylnaphthalene	11.0	U	11.0	
88-74-4	2-Nitroaniline	27.5	U	27.5	
88-75-5	2-Nitrophenol	11.0	U	11.0	
91-94-1	3,3'-Dichlorobenzidine	11.0	U	11.0	
99-09-2	3-Nitroaniline	27.5	U	27.5	
534-52-1	2-Methyl-4,6-dinitrophenol	27.5	U	27.5	
59-50-7	4-Chloro-3-methylphenol	11.0	U	11.0	
106-47-8	4-Chloroaniline	11.0	U	11.0	R
7005-72-3	4-Chlorophenyl-phenylether	11.0	U	11.0	
106-44-5	4-Methylphenol (p-Cresol)	11.0	U	11.0	
83-32-9	Acenaphthene	11.0	U	11.0	
208-96-8	Acenaphthylene	11.0	U	11.0	
120-12-7	Anthracene	11.0	U	11.0	
56-55-3	Benzo(a)anthracene	11.0	U	11.0	
50-32-8	Benzo(a)pyrene	11.0	U	11.0	
205-99-2	Benzo(b)fluoranthene	11.0	U	11.0	
191-24-2	Benzo(g,h,i)perylene	11.0	U	11.0	
207-08-9	Benzo(k)fluoranthene	11.0	U	11.0	
111-91-1	Bis(2-Chloroethoxy)methane	11.0	U	11.0	
111-44-4	Bis(2-Chloroethyl)ether	11.0	U	11.0	
108-60-1	bis(2-Chloroisopropyl)ether	11.0	U	11.0	
117-81-7	bis(2-ethylhexyl)phthalate 11.0 ~~10.0 J~~		J	11.0	u

11/13/04 mf

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW58FD1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 910 | Units: mL | Lab Sample ID: 20311131115 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1520

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1947

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
101-55-3	4-Bromophenyl-phenylether	11.0	U	11.0
85-68-7	Butylbenzylphthalate	11.0	U	11.0
86-74-8	Carbazole	11.0	U	11.0
218-01-9	Chrysene	11.0	U	11.0
84-74-2	Di-n-butylphthalate 11.0	~~1.0~~ 0.839	J	11.0
117-84-0	Di-n-octylphthalate	11.0	U	11.0
53-70-3	Dibenz(a,h)anthracene	11.0	U	11.0
132-64-9	Dibenzofuran	11.0	U	11.0
84-66-2	Diethylphthalate	11.0	U	11.0
131-11-3	Dimethyl-phthalate	11.0	U	11.0
105-67-9	2,4-Dimethylphenol	11.0	U	11.0
206-44-0	Fluoranthene	11.0	U	11.0
86-73-7	Fluorene	11.0	U	11.0
118-74-1	Hexachlorobenzene	11.0	U	11.0
87-68-3	Hexachlorobutadiene	11.0	U	11.0
77-47-4	Hexachlorocyclopentadiene	11.0	U	11.0
67-72-1	Hexachloroethane	11.0	U	11.0
193-39-5	Indeno(1,2,3-cd)pyrene	11.0	U	11.0
78-59-1	Isophorone	11.0	U	11.0
91-20-3	Naphthalene	11.0	U	11.0
100-01-6	4-Nitroaniline	27.5	U	27.5
98-95-3	Nitrobenzene	11.0	U	11.0
100-02-7	4-Nitrophenol	27.5	U	27.5
87-86-5	Pentachlorophenol	27.5	U	27.5
85-01-8	Phenanthrene	11.0	U	11.0
108-95-2	Phenol	11.0	U	11.0
129-00-0	Pyrene	11.0	U	11.0
621-64-7	N-Nitroso-di-n-propylamine	11.0	U	11.0
86-30-6	N-Nitrosodiphenylamine	11.0	U	11.0
95-48-7	o-Cresol	11.0	U	11.0

UJ
UJ

11/13/04

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL
Sample ID: SKGW58FD1008

Lab Code: LA024 2 Case No.:
Contract:

SAS No.: SDG No.: 203111311
Lab File ID: 2031126/S4185

Matrix: Water
Lab Sample ID: 20311131115

Sample wt/vol: Units:
Date Collected: 11/13/03 Time: 1520

Level: (low/med)
Date Received: 11/14/03

% Moisture: not dec.
Date Extracted:

GC Column: DB-5MS-30M ID: .25 (mm)
Date Analyzed: 11/26/03 Time: 1947

Concentrated Extract Volume: (µL)
Dilution Factor: 1 Analyst: RLW

Injection Volume: 1.0 (µL)
Prep Method:

GPC Cleanup: (Y/N) N pH:
Analytical Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found : 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	301-02-0	9-Octadecenamide, (Z)-	14.197	45.4	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGWFB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131116 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1545

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 2016

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: *ug/L*

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	10.0	J	10.0	it

11/13/04 psel

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGWFB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131116 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1545

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 2016

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	~~10.0~~ 8.484	J	10.0	UJ HJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

11/13/04 MK

SEMI VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL | Sample ID: SKGWFB1008

Lab Code: LA024 2 | Case No.: | Contract:

SAS No.: | SDG No.: 20311311 | Lab File ID: 2031126/S4186

Matrix: Water | Lab Sample ID: 20311131116

Sample wt/vol: | Units: | Date Collected: 11/13/03 | Time: 1545

Level: (low/med) | Date Received: 11/14/03

% Moisture: not dec. | Date Extracted:

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 2016

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RLW

Injection Volume: 1.0 (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found : 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	301-02-0	9-Octadecenamide, (Z)-	14.195	28	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW261008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131121 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/14/03 | Time: 1240

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1542

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	W
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	~~10.0~~ 10.0	J	10.0	ll

1/13/04 MR

1B

SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW261008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131121 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/14/03 | Time: 1240

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: DB-5MS-30M | ID: 25 (mm) | Date Analyzed: 11/26/03 | Time: 1542

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	10.0 ~~0.694~~	J	10.0	UJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

11/30/04 MT

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL

Lab Code: LA024 2 Case No.:

SAS No.: SDG No.: 203111311

Matrix: Water

Sample wt/vol: Units:

Level: (low/med)

% Moisture: not dec.

GC Column: DB-5MS-30M ID: .25 (mm)

Concentrated Extract Volume: (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH:

Sample ID: SKGW261008

Contract:

Lab File ID: 2031126/S4176

Lab Sample ID: 20311131121

Date Collected: 11/14/03 Time: 1240

Date Received: 11/15/03

Date Extracted:

Date Analyzed: 11/26/03 Time: 1542

Dilution Factor: 1 Analyst: RLW

Prep Method:

Analytical Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found : 5

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	120-40-1	Dodecanamide, N,N-bis(2-hydrox	8.541	13.7	
2.	57-10-3	Hexadecanoic acid	10.716	17.6	
3.	112-80-1	Oleic Acid	11.595	34.2	
4.	85-60-9	Phenol, 4,4'-butylidenebis[2-(	13.876	47.7	
5.	301-02-0	9-Octadecenamide, (Z)-	14.197	54.1	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW301008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131122 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/14/03 | Time: 1015

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1322

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl) phthalate	NO RECORD	J	10.0	U

11/13/04 MK

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW301008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131122 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/14/03 | Time: 1015

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1322

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0
85-68-7	Butylbenzylphthalate	10.0	U	10.0
86-74-8	Carbazole	10.0	U	10.0
218-01-9	Chrysene	10.0	U	10.0
84-74-2	Di-n-butylphthalate	10.0 0.519	J	10.0
117-84-0	Di-n-octylphthalate	10.0	U	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0
132-64-9	Dibenzofuran	10.0	U	10.0
84-66-2	Diethylphthalate	10.0	U	10.0
131-11-3	Dimethyl-phthalate	10.0	U	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	10.0
206-44-0	Fluoranthene	10.0	U	10.0
86-73-7	Fluorene	10.0	U	10.0
118-74-1	Hexachlorobenzene	10.0	U	10.0
87-68-3	Hexachlorobutadiene	10.0	U	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0
67-72-1	Hexachloroethane	10.0	U	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0
78-59-1	Isophorone	10.0	U	10.0
91-20-3	Naphthalene	10.0	U	10.0
100-01-6	4-Nitroaniline	25.0	U	25.0
98-95-3	Nitrobenzene	10.0	U	10.0
100-02-7	4-Nitrophenol	25.0	U	25.0
87-86-5	Pentachlorophenol	25.0	U	25.0
85-01-8	Phenanthrene	10.0	U	10.0
108-95-2	Phenol	10.0	U	10.0
129-00-0	Pyrene	10.0	U	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0
95-48-7	o-Cresol	10.0	U	10.0

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UJ

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SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL
Sample ID: SKGW301308
Lab Code: LA024 2 Case No.:
Contract:
SAS No.: SDG No.: 203111311
Lab File ID: 2031126/S4171
Matrix: Water
Lab Sample ID: 203111131122
Sample wt/vol: Units:
Date Collected: 11/14/03 Time: 1015
Level: (low/med)
Date Received: 11/15/03
% Moisture: not dec.
Date Extracted:
GC Column: DB-5MS-30M ID: .25 (mm)
Date Analyzed: 11/26/03 Time: 1322
Concentrated Extract Volume: (µL)
Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0 (µL)
Prep Method:
GPC Cleanup: (Y/N) N pH:
Analytical Method: SW-846 8270C
Instrument ID: MSSV2

Number TICs Found: 2

CONCENTRATION UNITS:

	CAS NO.	*COMPOUND*	*RT*	*EST. CONC.*	*Q*
1.	85-60-9	Phenol, 4,4'-butylidenebis[2-(	13.864	22.5	
2.	301-02-0	9-Octadecenamide, (Z)-	14.185	36.5	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW611008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131123 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/14/03 | Time: 1100

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1349

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	1.52	J	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	~~10.0~~ 1.06	J	10.0	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL		**Sample ID:** SKGW611008	
Lab Code: LA024	**Case No:**	**Contract:**	
Matrix: Water		**SAS No.:**	**SDG No.:** 203111311
Sample wt/vol: 1000	**Units:** mL	**Lab Sample ID:** 20311131123	**Lab File ID:** 2031126/S
Level: (low/med)		**Date Collected:** 11/14/03	**Time:** 1100
% Moisture:	**decanted: (Y/N)**	**Date Received:** 11/15/03	
GC Column: DB-5MS-30M	**ID:** 25 (mm)	**Date Analyzed:** 11/26/03	**Time:** 1349
Concentrated Sample Volume: 1000	(µL)	**Dilution Factor:** 1	**Analyst:** RLW
Soil Aliquot Volume:	(µL)	**Prep Method:**	
Injection Volume: 2	(µL)	**Analytical Method:** OLMO 4.2	
GPC Cleanup: (Y/N) N	**pH:**	**Instrument ID:** MSSV2	

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0
85-68-7	Butylbenzylphthalate	10.0	U	10.0
86-74-8	Carbazole	10.0	U	10.0
218-01-9	Chrysene	10.0	U	10.0
84-74-2	Di-n-butylphthalate	~~10.0~~ 0.852	J	10.0
117-84-0	Di-n-octylphthalate	10.0	U	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0
132-64-9	Dibenzofuran	10.0	U	10.0
84-66-2	Diethylphthalate	10.0	U	10.0
131-11-3	Dimethyl-phthalate	10.0	U	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	10.0
206-44-0	Fluoranthene	10.0	U	10.0
86-73-7	Fluorene	10.0	U	10.0
118-74-1	Hexachlorobenzene	10.0	U	10.0
87-68-3	Hexachlorobutadiene	10.0	U	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0
67-72-1	Hexachloroethane	10.0	U	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0
78-59-1	Isophorone	10.0	U	10.0
91-20-3	Naphthalene	10.0	U	10.0
100-01-6	4-Nitroaniline	25.0	U	25.0
98-95-3	Nitrobenzene	10.0	U	10.0
100-02-7	4-Nitrophenol	25.0	U	25.0
87-86-5	Pentachlorophenol	25.0	U	25.0
85-01-8	Phenanthrene	10.0	U	10.0
108-95-2	Phenol	10.0	U	10.0
129-00-0	Pyrene	10.0	U	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0
95-48-7	o-Cresol	10.0	U	10.0

WJ WS

11/13/04 mm

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL
Lab Code: LA024 2 Case No.:
SAS No.: SDG No.: 203111311
Matrix: Water
Sample wt/vol: Units:
Level: (low/med)
% Moisture: not dec.
GC Column: DB-5MS-30M ID: .25 (mm)
Concentrated Extract Volume: (µL)
Injection Volume: 1.0 (µL)
GPC Cleanup: (Y/N) N pH:

Sample ID: SKGW611008
Contract:
Lab File ID: 2031126/S4172
Lab Sample ID: 20311131123
Date Collected: 11/14/03 Time: 1100
Date Received: 11/15/03
Date Extracted:
Date Analyzed: 11/26/03 Time: 1349
Dilution Factor: 1 Analyst: RLW
Prep Method:
Analytical Method: SW-846 8270C
Instrument ID: MSSV2

Number TICs Found : 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	301-02-0	9-Octadecenamide, (Z)-	14.194	47.9	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW631008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131127 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/14/03 | Time: 1220

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1514

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	10.0	J	10.0	U

1/13/04 psa

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW631008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131127 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/14/03 | Time: 1220

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1514

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	~~10.0~~ 0.801	J	10.0	UJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	UJ
53-70-3	*Dibenz(a,h)anthracene*	*10.0*	*U*	*10.0*	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	*Phenanthrene*	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

1/13/04 MC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL | Sample ID: SKGW631008

Lab Code: LA024 2 | Case No.: | Contract:

SAS No.: | SDG No.: 203111311 | Lab File ID: 2031126/S4175

Matrix: Water | Lab Sample ID: 20311131127

Sample wt/vol: | Units: | Date Collected: 11/14/03 | Time: 1220

Level: (low/med) | Date Received: 11/15/03

% Moisture: not dec. | Date Extracted:

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1514

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RLW

Injection Volume: 1.0 (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found : 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	301-02-0	9-Octadecenamide, (Z)-	14.198	48.8	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW241008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 850 | Units: mL | Lab Sample ID: 20311131128 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/14/03 | Time: 1435

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1610

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	11.8	U	11.8	
88-06-2	2,4,6-Trichlorophenol	11.8	U	11.8	
120-83-2	2,4-Dichlorophenol	11.8	U	11.8	
51-28-5	2,4-Dinitrophenol	29.4	U	29.4	WJ
121-14-2	2,4-Dinitrotoluene	11.8	U	11.8	
606-20-2	2,6-Dinitrotoluene	11.8	U	11.8	
91-58-7	2-Chloronaphthalene	11.8	U	11.8	
95-57-8	2-Chlorophenol	11.8	U	11.8	
91-57-6	2-Methylnaphthalene	11.8	U	11.8	
88-74-4	2-Nitroaniline	29.4	U	29.4	
88-75-5	2-Nitrophenol	11.8	U	11.8	
91-94-1	3,3'-Dichlorobenzidine	11.8	U	11.8	
99-09-2	3-Nitroaniline	29.4	U	29.4	
534-52-1	2-Methyl-4,6-dinitrophenol	29.4	U	29.4	
59-50-7	4-Chloro-3-methylphenol	11.8	U	11.8	
106-47-8	4-Chloroaniline	11.8	U	11.8	R
7005-72-3	4-Chlorophenyl-phenylether	11.8	U	11.8	
106-44-5	4-Methylphenol (p-Cresol)	11.8	U	11.8	
83-32-9	Acenaphthene	11.8	U	11.8	
208-96-8	Acenaphthylene	11.8	U	11.8	
120-12-7	Anthracene	11.8	U	11.8	
56-55-3	Benzo(a)anthracene	11.8	U	11.8	
50-32-8	Benzo(a)pyrene	11.8	U	11.8	
205-99-2	Benzo(b)fluoranthene	11.8	U	11.8	
191-24-2	Benzo(g,h,i)perylene	11.8	U	11.8	
207-08-9	Benzo(k)fluoranthene	11.8	U	11.8	
111-91-1	Bis(2-Chloroethoxy)methane	11.8	U	11.8	
111-44-4	Bis(2-Chloroethyl)ether	11.8	U	11.8	
108-60-1	bis(2-Chloroisopropyl)ether	11.8	U	11.8	
117-81-7	bis(2-ethylhexyl)phthalate	~~11.8~~ 105	J	11.8	U

11/13/04 mr

SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW241008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 850 | Units: mL | Lab Sample ID: 20311131128 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/14/03 | Time: 1435

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 1610

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	11.8	U	11.8	
85-68-7	Butylbenzylphthalate	11.8	U	11.8	
86-74-8	Carbazole	11.8	U	11.8	
218-01-9	Chrysene	11.8	U	11.8	
84-74-2	Di-n-butylphthalate	11.2	J	11.8	US
117-84-0	Di-n-octylphthalate	11.8	U	11.8	US
53-70-3	Dibenz(a,h)anthracene	11.8	U	11.8	
132-64-9	Dibenzofuran	11.8	U	11.8	
84-66-2	Diethylphthalate	11.8	U	11.8	
131-11-3	Dimethyl-phthalate	11.8	U	11.8	
105-67-9	2,4-Dimethylphenol	11.8	U	11.8	
206-44-0	Fluoranthene	11.8	U	11.8	
86-73-7	Fluorene	11.8	U	11.8	
118-74-1	Hexachlorobenzene	11.8	U	11.8	
87-68-3	Hexachlorobutadiene	11.8	U	11.8	
77-47-4	Hexachlorocyclopentadiene	11.8	U	11.8	
67-72-1	Hexachloroethane	11.8	U	11.8	
193-39-5	Indeno(1,2,3-cd)pyrene	11.8	U	11.8	
78-59-1	Isophorone	11.8	U	11.8	
91-20-3	Naphthalene	11.8	U	11.8	
100-01-6	4-Nitroaniline	29.4	U	29.4	
98-95-3	Nitrobenzene	11.8	U	11.8	
100-02-7	4-Nitrophenol	29.4	U	29.4	
87-86-5	Pentachlorophenol	29.4	U	29.4	
85-01-8	Phenanthrene	11.8	U	11.8	
108-95-2	Phenol	11.8	U	11.8	
129-00-0	Pyrene	11.8	U	11.8	
621-64-7	N-Nitroso-di-n-propylamine	11.8	U	11.8	
86-30-6	N-Nitrosodiphenylamine	11.8	U	11.8	
95-48-7	o-Cresol	11.8	U	11.8	

12/3/04 mc

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL
Lab Code: LA024 2 Case No.:
SAS No.: SDG No.: 203111311
Matrix: Water
Sample wt/vol: Units:
Level: (low/med)
% Moisture: not dec.
GC Column: DB-5MS-30M ID: .25 (mm)
Concentrated Extract Volume: (µL)
Injection Volume: 1.0 (µL)
GPC Cleanup: (Y/N) N pH:

Sample ID: SKGW241008
Contract:
Lab File ID: 2031126/S4177
Lab Sample ID: 20311131128
Date Collected: 11/14/03 Time: 1435
Date Received: 11/15/03
Date Extracted:
Date Analyzed: 11/26/03 Time: 1610
Dilution Factor: 1 Analyst: RLW
Prep Method:
Analytical Method: SW-846 8270C
Instrument ID: MSSV2

Number TICs Found : 2

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	54789-40-1	Heptanamide, 4-ethyl-5-methyl-	12.581	15.3	
2.	301-02-0	9-Octadecenamide, (Z)-	14.185	43.3	

SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW07R1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131101

Level: (low/med) | Date Collected: 11/12/03 | Time: 1453

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/29/03 | Time: 1850

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1101

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW06R1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131102

Level: (low/med) | Date Collected: 11/12/03 | Time: 1525

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/29/03 | Time: 1918

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1102

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW591008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131103

Level: (low/med) | Date Collected: 11/12/03 | Time: 1105

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: RTX-50-30M | ID: 53 (mm) | Date Analyzed: 11/29/03 | Time: 1946

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1102

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW601008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131104

Level: (low/med) | Date Collected: 11/12/03 | Time: 1128

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/29/03 | Time: 2014

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1102

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	*Dieldrin*	*0.100*	U	*0.100*
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW62A1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131105

Level: (low/med) | Date Collected: 11/12/03 | Time: 1201

% Moisture: | decanted: (Y/N) | Date Received: 11/13/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/29/03 | Time: 2042

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1102

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Water
Sample wt/vol: 1000 Units: mL
Level: (low/med)
% Moisture: decanted: (Y/N)
GC Column: RTX-50-30M ID: .53 (mm)
Concentrated Extract Volume: (µL)
Injection Volume: (µL)
GPC Cleanup: (Y/N) N pH:

Sample ID: SKGW641008
Contract:
SAS No.: SDG No.: 203111311
Lab Sample ID: 20311131106
Date Collected: 11/12/03 Time: 1240
Date Received: 11/13/03
Date Analyzed: 11/29/03 Time: 2110
Dilution Factor: 1 Analyst: DLB
Prep Method:
Analytical Method: OLMO 4.2
Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A
Lab File ID: 2031129/SV1102

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW561008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131114

Level: (low/med) | Date Collected: 11/13/03 | Time: 1510

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/30/03 | Time: 0220

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1103

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW58FD1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131115

Level: (low/med) | Date Collected: 11/13/03 | Time: 1520

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/30/03 | Time: 0248

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1103

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGWFB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 Units: mL | Lab Sample ID: 203111131116

Level: (low/med) | Date Collected: 11/13/03 | Time: 1545

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: RTX-50-30M ID: .53 (mm) | Date Analyzed: 11/30/03 | Time: 0316

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1103

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW261008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131121

Level: (low/med) | Date Collected: 11/14/03 | Time: 1240

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/30/03 | Time: 0124

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1103

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW301005

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131122

Level: (low/med) | Date Collected: 11/14/03 | Time: 1015

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/29/03 | Time: 2303

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1102

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW611008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131123

Level: (low/med) | Date Collected: 11/14/03 | Time: 1100

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/29/03 | Time: 2331

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1102

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW631008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131127

Level: (low/med) | Date Collected: 11/14/03 | Time: 1220

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/30/03 | Time: 0055

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1103

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKGW241008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111311

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311131128

Level: (low/med) | Date Collected: 11/14/03 | Time: 1435

% Moisture: | decanted: (Y/N) | Date Received: 11/15/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/30/03 | Time: 0152

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1103

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 203111413

PROJECT MANAGER: Ron Rolker

Date: January 15, 2004

Data Validator: Mark Kromis

APPENDIX C
LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 203111413.

GCAL #	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-04	SKSW511008 DUP
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008
203111413-08	SKSW511008 (DISS)
203111413-09	SKSW511008 MS (DISS)
203111413-10	SKSW511008 DUP (DISS)
203111413-11	SKSWFB1008 (DISS)
203111413-12	SKSW521008 (DISS)
203111413-13	SKSW531008 (DISS)

INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Calibration
   A. Initial Calibration (IC)
   B. Continuing Calibration (CC)
3. Blanks
4. Inductively Coupled Plasma (ICP) Interference Check Sample
5. Laboratory Control Sample (LCS)
6. Duplicate Analysis
7. Spike Sample Analysis
8. ICP Serial Dilution
9. System Performance
10. Documentation
11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. DUPLICATE ANALYSIS

The Relative Percent Difference (RPD) between the sample and duplicate results were within the acceptance criteria for all target compounds with the exception of Zinc in the dissolved fraction. The Zinc results were previously qualified do to the low percent recovery for Zinc in the CRDL standard.

7. SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSW511008 and SKSW511008 (Dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total and dissolved fractions with the exception of Selenium (0%). As per the National Functional Guidelines: if the percent recovery is less than 10% then qualify detected results for that analyte with "J" and non-detected results with "R".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The percent differences were within the acceptance criteria for all target analytes in the total and dissolved fractions.

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

The documentation appeared accurate and in order.

11. OVERALL ASSESSMENT

There was no target analytes detected in the Field Blank analyzed for total metals. Barium, Copper, and Zinc were detected in the Field Blank (Dissolved) at a concentration of 0.3 B, 1.6 B and 0.6 B ppb respectively. It should be noted that the laboratory supplied the water used for the Field Blank. The results that are greater than the IDL but less than the CRDL are flagged with a ("B") qualifier by the laboratory.

The percent recoveries for Zinc in the Contract Required Detection Limit (CRDL) standards were 69.8%, 69.7%, 70.1%, and 70.9%. The detected Lead results were qualified with a "J" and the non-detected Lead results were qualified with "UJ".

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL #	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   A. IC
   B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +- 2°C.

2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV2. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 11/26/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes with the exception of 4-Chloroaniline. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of Naphthalene (30.1%), 2,4-Dinitrophenol (34.8%), Diethylphthalate (35.1%), Di-n-butylphthalate (47.4%), Di-n-octylphthalate (37.3%), and Caprolactam (35.8%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 8.4%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for Naphthalene and Caprolactam and the %RSD were recalculated. The recalculated %RSD was 28.1% and 9.0%, which are within the acceptance criteria of less than 30%. Naphthalene and Caprolactam results greater than 160 ppb were qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

Two CCs dated 11/26/03 and 12/1/03 were analyzed in support of the semivolatile sample analyses reported in the data submissions.

The RRF's for the CC dated 11/26/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 11/26/03 were within the acceptance criteria with the exception the %D for 2,4-Dintrophenol, Di-n-butylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

The RRF's for the CC dated 12/1/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 12/1/03 were within the acceptance criteria with the exception the %D for Naphthalene, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Di-n-butylphthalate, and Di-n-octylphthalate.

As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

4. BLANKS

One laboratory semivolatile method blank and one field blank were analyzed with this SDG. The results are summarized below.

Method Blank (MB 131004)

Di-n-butyl phthalate (0.731 ppb) was detected in the method blank extracted on 11/18/03. The results for Di-n-butyl phthalate less than 7.31 ppb were qualified with "U" for samples extracted with method blank 131004.

Bis (2-Ethylhexyl) phthalate (0.331 J ppb) was also detected in the method blank extracted on 11/18/03. The results for bis (2-Ethylhexyl) phthalate less than 3.31 ppb were qualified with "U" for samples extracted with method blank 131004.

Field Blank (SKSW00FB1008)

The presence of Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate detected in the field blank was mitigated because Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate were detected in the associated method blank.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol in the MS and 4-Nitrophenol and 2,4-Dinitrotoluene in the MSD. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses.

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low-level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction/analysis of the groundwater samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate was mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL #	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit.

However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   A. IC
   B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Laboratory Control Sample
8. Internal Standards Performance
9. Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. System Performance
12. Documentation
13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. Two bromofluorobenzene (BFB) tunes were run. The BFB tunes were acceptable.

3. CALIBRATION

A. Initial Calibration

Two ICs dated 11/17/03 and 11/18/03 were analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes.

The RRF's and the average RRF for the IC dated 11/17/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The RRF's and the average RRF for the IC dated 11/18/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

B. Continuing Calibration

Two CC's dated 11/17/03 and 11/18/03 were analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. The Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

Two laboratory volatile method blanks, a storage blank, a Trip Blank, and a Field Blank were analyzed with this SDG. The results are summarized below:

Method Blanks

1117V2BLK01 (11/17/03)

Methylene chloride was detected at a concentration of 0.14 ppb in the method blank analyzed on 11/17/03.

1118V2BLK01 (11/18/03)

There was no target analytes detected in the method blank analyzed on 11/18/03.

Storage Blank (VHBLK01)

There was no target analytes detected in the storage blank.

Trip Blank (SKGWTB1008)

Sulfur dioxide was detected at a concentration of 311 ppb in the Trip Blank dated 11/13/03.

Field Blank (SKSWFB1008)

Benzene (0.18 ppb), Ethylbenzene (0.063 ppb), Carbon disulfide (0.34 ppb) Methylene chloride (1.6 ppb), Toluene (0.82 ppb), and Xylenes (0.38 ppb) were detected in the Field Blank collected on 11/13/03. The Methylene chloride detected in the Field Blank collected on 11/13/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Field Blank at a concentration of 205 ppb.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was submitted for MS/MSD analysis. The percent recoveries and RDP between the MS/MSD were within the acceptance limits. A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

Two LCS were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. DOCUMENTATION

The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers. It should be noted that the field blank contained detectable quantities of petroleum related analytes although the constituents were not detected in any of the associated surface water samples, therefore no action was taken.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 203111413 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL #	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3. IC
4. Calibration Verification
5. Blanks
6. Surrogate Spikes
7. Matrix Spike Matrix Spike Duplicate (MS/MSD)
8. Pesticide Cleanup Checks
9. Target Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 130964

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 11/18/03.

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of gamma-BHC. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. *National Functional Guidelines for Inorganic Data Review.*

US EPA, 1999. *National Functional Guidelines for Organic Data Review.*

NELAP CERTIFICATE NUMBER 01955

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC.

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/02/2003

GCAL Report 203111413

Deliver To	Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300
Attn	Pat Higgins

Customer Earth Tech

Project Skinner Landfill

000001

CASE NARRATIVE

Client: Earth Tech **Report:** 203111413

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

SEMI-VOLATILES MASS SPECTROMETRY

In the semi-volatile analysis, 4-Nitrophenol was recovered above the QC limits in the MS/MSD. 2,4-Dinitrotoluene was slightly above in the QC limit in the MSD.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the Pesticide analysis of the MS/MSD, the spike recovery for gamma-BHC was below QC limits. This is attributed to matrix interference.

In the analysis of RESC01 (resolution check), Methoxychor and Endosulfan Sulfate were not resolved on the confirmation column, however all compounds were resolved on the initial column.

METALS

In the ILM04.1 - CLP Metals analysis for prep batches 265578 and 265580, the MS recovery was outside the control limits for Selenium. The LCS recovery was within control limits. This indicates the analysis is in control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0%.

Zinc is flagged with an "*" for samples associated with prep batch 265580 due to the fact that the absolute difference between the original sample result and the duplicated result is greater than the CRDL, and the sample and/or duplicate result is between the CRDL and 5X the CRDL.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reporduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

SCOTT A. BAILEY
OPERATIONS MANAGER
GCAL REPORT 203111413

Report Sample Summary

	GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
SW50	20311141301	SKSW511008	Water	11/13/2003 11:15	11/14/2003 09:30
"	20311141302	SKSW511008 MS	Water	11/13/2003 11:22	11/14/2003 09:30
"	20311141303	SKSW511008 MSD	Water	11/13/2003 11:40	11/14/2003 09:30
"	20311141304	SKSW511008 DUP	Water	11/13/2003 11:40	11/14/2003 09:30
	20311141305	SKSWFB1008	Water	11/13/2003 12:45	11/14/2003 09:30
SW51	20311141306	SKSW521008	Water	11/13/2003 11:55	11/14/2003 09:30
SW52	20311141307	SKSW531008	Water	11/13/2003 12:12	11/14/2003 09:30
SW50	20311141308	SKSW511008 (DISS)	Water	11/13/2003 11:15	11/14/2003 09:30
"	20311141309	SKSW511008 MS (DISS)	Water	11/13/2003 11:22	11/14/2003 09:30
"	20311141310	SKSW511008 DUP (DISS)	Water	11/13/2003 11:40	11/14/2003 09:30
	20311141311	SKSWFB1008 (DISS)	Water	11/13/2003 12:45	11/14/2003 09:30
SW51	20311141312	SKSW521008 (DISS)	Water	11/13/2003 11:55	11/14/2003 09:30
SW52	20311141313	SKSW531008 (DISS)	Water	11/13/2003 12:12	11/14/2003 09:30

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SHSW511008

Lab Code: LA024 | Case No | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311141301

Level: (low/med) | Lab File ID: 2031117/T0540

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1115

GC Column: DB-624-30M | ID: 53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1417

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

Analytical Method: OLC02.1 - CLP Vo

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	
591-78-6	2-Hexanone	5.0	U	5.0	R
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

1/13/04 MS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SW50

Lab Name: GCAL | Sample ID: SKSW511008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311141301

Level: (low/med) | Lab File ID: 2031117/T0540

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1115

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/17/03 | Time: 1417

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKSW511008
SW50

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No: SDG No.: 203111413

Matrix: Water Lab Sample ID: 20311141301

Sample wt/vol: Units Lab File ID: 2031117/T0540

Level: (low/med) Date Collected: 11/13/03 Time: 1115

% Moisture: not dec. Date Received: 11/14/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 1417

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS

	CAS NO.	*COMPOUND*	*RT*	*EST. CONC.*	*Q*	
1.	7446-09-5	Sulfur dioxide	1.48	116		U

11/25/03 mfs

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWFB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311141305

Level: (low/med) | Lab File ID: 2031118P/T0590

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1245

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2358

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	0.18	J	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	0.34	J	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	0.063	J	1.0	
75-09-2	Methylene chloride	1.6	J	2.0	
100-42-5	Styrene	1.0	U	1.0	

1/13/04

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWFB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311141305

Level: (low/med) | Lab File ID: 2031118P/T0590

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1245

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/18/03 | Time: 2358

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

Analytical Method: OLC02.1 - CLP Vo

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	0.82	J	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	0.38	J	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKSWFB1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix: Water Lab Sample ID: 20311141305

Sample wt/vol: Units: Lab File ID: 2031118P/T0590

Level: (low/med) Date Collected: 11/13/03 Time: 1245

% Moisture: not dec. Date Received: 11/14/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/18/03 Time: 2358

Instrument ID: MSV2 Dilution Factor: 1 Analyst: HJL

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	7446-09-5	Sulfur dioxide	1:464	205	

VOLATILE ORGANICS ANALYSIS DATA SHEET

SW51

Lab Name: GCAL | Sample ID: SKSW521008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311141306

Level: (low/med) | Lab File ID: 2031118P/TC591

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1155

GC Column: DB-624-30M | ID: 53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/19/03 | Time: 0023

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

11/13/04 MG

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SW51

Lab Name: GCAL | Sample ID: SKSW521008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311141306

Level: (low/med) | Lab File ID: 2031118P/T0591

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1155

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/19/03 | Time: 0023

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKSW521306
CW 21

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix: Water Lab Sample ID: 20311141306

Sample wt/vol: Units Lab File ID: 2031118P/T0591

Level: (low/med) Date Collected: 11/13/03 Time: 1155

% Moisture: not dec. Date Received: 11/14/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/19/03 Time: 0023

Instrument ID: MSV2 Dilution Factor: 1 Analyst: HJL

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	*COMPOUND*	*RT*	*EST. CONC.*	*Q*	
1.	7446-09-5	Sulfur dioxide	1.465	255		U

11/19/03 mw

VOLATILE ORGANICS ANALYSIS DATA SHEET

SW 52

Lab Name: GCAL | Sample ID: SKSW531008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20311141307

Level: (low/med) | Lab File ID: 2031118P/T0592

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1212

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/19/03 | Time: 0047

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

1/13/04 MSa

VOLATILE ORGANICS ANALYSIS DATA SHEET

GW52

Lab Name: GCAL | Sample ID: SKSMW531008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 203111413O7

Level: (low/med) | Lab File ID: 2031118P/T0592

% Moisture: not dec. | Date Collected: 11/13/03 | Time: 1212

GC Column: DB-624-30M | ID: 53 (mm) | Date Received: 11/14/03

Instrument ID: MSV2 | Date Analyzed: 11/19/03 | Time: 0047

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: HJL

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKSW531008
SW52

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix: Water Lab Sample ID: 20311141307

Sample wt/vol: Units: Lab File ID: 2031118P/T0592

Level: (low/med) Date Collected: 11/13/03 Time: 1212

% Moisture: not dec. Date Received: 11/14/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 11/19/03 Time: 0047

Instrument ID: MSV2 Dilution Factor: 1 Analyst: HJL

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q	
1.	7446-09-5	Sulfur dioxide	1.464	179		U

11/19/04 MS

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SW 50

Lab Name: GCAL | Sample ID: SKSW511008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141301 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1115

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: 25 (mm) | Date Analyzed: 11/26/03 | Time: 2112

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	10.0	U	10.0	

11/13/03 MV

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SW50

Lab Name: GCAL | Sample ID: SKSW511008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141301 | Lab File ID: 2031126/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1115

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 2112

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	~~10.0~~ 1.55	J	10.0	LJ
117-84-0	Di-n-octylphthalate	1.15	J	10.0	LJ
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	2.17	J	10.0	J
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

1/13/04 MR

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SW50

Lab Name: GCAL | Sample ID: SKSW511008

Lab Code: LA024 2 | Case No.: | Contract:

SAS No.: | SDG No.: 20311141 3 | Lab File ID: 2031126/S4188

Matrix: Water | Lab Sample ID: 20311141301

Sample wt/vol: | Units: | Date Collected: 11/13/03 | Time: 1115

Level: (low/med) | Date Received: 11/14/03

% Moisture: not dec. | Date Extracted:

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 11/26/03 | Time: 2112

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RLW

Injection Volume: 1.0 (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytica Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found : 2

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.		Unknown	13.473	1210	
2.	301-02-0	9-Octadecenamide, (Z)-	14.198	38.7	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWFB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141305 | Lab File ID: 2031201/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1245

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/01/03 | Time: 1740

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	~~10.0~~ 0.784	J	10.0	U

1/13/04 MC

SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SHSWEB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141305 | Lab File ID: 2031201/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1245

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/01/03 | Time: 1740

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	1.0 [illegible]	J	10.0	UJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	UJ
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	UJ
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	UJ
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	UJ
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

11/13/03

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL

Lab Code: LA024 2 Case No.:

SAS No.: SDG No.: 203111413

Matrix: Water

Sample wt/vol: Units:

Level: (low/med)

% Moisture: not dec.

GC Column: DB-5MS-30M ID: .25 (mm)

Concentrated Extract Volume: (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH:

Sample ID: SKSWFB1008

Contract:

Lab File ID: 2031201/S4200

Lab Sample ID: 20311141305

Date Collected: 11/13/03 Time: 1245

Date Received: 11/14/03

Date Extracted:

Date Analyzed: 12/01/03 Time: 1740

Dilution Factor: 1 Analyst: RLW

Prep Method:

Analytical Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found : 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	301-02-0	9-Octadecenamide, (Z)-	14.171	33.3	

SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

SW 5'

Lab Name: GCAL | Sample ID: SKSW521008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141306 | Lab File ID: 2031201/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1155

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/01/03 | Time: 1806

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	10.8	J	10.0	U

1/13/04 MV

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SW51

Lab Name: GCAL | Sample ID: SKSW521008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141306 | Lab File ID: 2031201/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1155

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/01/03 | Time: 1806

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	10.0	U	10.0	UJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	UJ
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	UJ m&a
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	UJ
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	UJ
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

1/13/04 MSL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SW51

Lab Name: GCAL
Sample ID: SKSW521008
Lab Code: LA024 2 Case No.:
Contract
SAS No.: SDG No.: 20311141 3
Lab File ID: 203*201/S4201
Matrix: Water
Lab Sample ID: 20311141306
Sample wt/vol: Units:
Date Collected: 11/13/03 Time: 1155
Level: (low/med)
Date Received: 11/14/03
% Moisture: not dec.
Date Extracted:
GC Column: DB-5MS-30M ID: .25 (mm)
Date Analyzed: 12/01/03 Time: 1806
Concentrated Extract Volume: (µL)
Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0 (µL)
Prep Method:
GPC Cleanup: (Y/N) N pH:
Analytical Method: SW-846 8270C
Instrument ID: MSSV2

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	*COMPOUND*	*RT*	*EST. CONC.*	*Q*
1.	301-02-0	9-Octadecenamide, (Z)-	14.174	31.5	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SW52

Lab Name: GCAL | Sample ID: SKSW531008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141307 | Lab File ID: 2031201/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1212

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/01/03 | Time: 1833

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	~~10.0~~ 0.869	J	10.0	u
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	10.0	U	10.0	uJ
117-84-0	Di-n-octylphthalate	10.0	U	10.0	uJ
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	uJ mr
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	uJ
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	uJ
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	

1/13/04

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SW52

Lab Name: GCAL | Sample ID: SKSW531008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141307 | Lab File ID: 2031201/S

Level: (low/med) | Date Collected: 11/13/03 | Time: 1212

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/01/03 | Time: 1833

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

1/13/04 MA

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL

Lab Code: LA024 2 Case No.:

SAS No.: SDG No.: 203111413

Matrix: Water

Sample wt/vol: Units:

Level: (low/med)

% Moisture: not dec.

GC Column: DB-5MS-30M ID: .25 (mm)

Concentrated Extract Volume: (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH:

Sample ID: SKSW531008 SW52

Contract:

Lab File ID: 2031201/S4202

Lab Sample ID: 20311141307

Date Collected: 11/13/03 Time: 1212

Date Received: 11/14/03

Date Extracted:

Date Analyzed: 12/01/03 Time: 1833

Dilution Factor: 1 Analyst: RLW

Prep Method:

Analytical Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found : 10

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	0-00-0	Butyl hexadecanoate	11.734	17.5	
2.	301-02-0	9-Octadecenamide, (Z)-	14.182	39.3	
3.	112-95-8	Eicosane	11.782	5.1	
4.	822-23-1	Acetic acid, octadecyl ester	11.829	3.64	
5.	638-67-5	Tricosane	12.222	4.71	
6.	123-95-5	Octadecanoic acid, butyl ester	12.602	18.3	
7.	112-95-8	Eicosane	12.637	9.05	
8.	630-03-5	Nonacosane	13.029	7.95	
9.	629-78-7	Heptadecane	13.422	10.4	
10.	7098-22-8	Tetratetracontane	13.79	7.21	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSW511008

Lab Code: LAB24 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141301

Level: (low/med) | Date Collected: 11/13/03 | Time: 1115

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/30/03 | Time: 0508

Concentrated Extract Volume: (uL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (uL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129SV1104

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWFB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141305

Level: (low/med) | Date Collected: 11/13/03 | Time: 1245

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/30/03 | Time: 0633

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1104

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSW521008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141306

Level: (low/med) | Date Collected: 11/13/03 | Time: 1155

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/30/03 | Time: 0701

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1104

CONCENTRATION UNITS: ug/L

CAS NO.	*COMPOUND*	*RESULT*	*Q*	*RL*
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSW531008 (SW52)

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203111413

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20311141307

Level: (low/med) | Date Collected: 11/13/03 | Time: 1212

% Moisture: | decanted: (Y/N) | Date Received: 11/14/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 11/30/03 | Time: 0729

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031129/SV1104

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

SOW No.:

EPA Sample No.	Lab Sample ID.
SKSW511008	20311141301
SKSW511008 MS	20311141302
SKSW511008 DUP	20311141304
SKSWFB1008	20311141305
SKSW521008	20311141306
SKSW531008	20311141307
SKSW511008 (DISS)	20311141308
SKSW511008 MS (DISS)	20311141309
SKSW511008 DUP (DISS)	20311141310
SKSWFB1008 (DISS)	20311141311
SKSW521008 (DISS)	20311141312
SKSW531008 (DISS)	20311141313

Were ICP interelement corrections applied ?	Yes / No	YES
Were ICP background corrections applied ?	Yes / No	YES
If yes-were raw data generated before application of background corrections ?	Yes / No	NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness for other than the conditions detailed above. Release of this data contained in this hardcopy data package and in the computer readable data submitted on the diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Shelley Bourgeois Name: Shelley Bourgeois

Date: 12/12/03 Title: Inorganic Manager

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW511008
SW50

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix: (soil / water) Water Lab Sample ID: 20311141301

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	3.4	B		P	
7440-39-3	Barium	41.3	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	4.4	B		P	
7439-89-6	Iron	69.2	B		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	1.3	B		P	J
57-12-5	Cyanide	3.0	U		AS	

11/15/04 mse

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKSWS1008 DUP
SW50

Lab Name: SCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix (soil / water): Water Lab Sample ID: 20311141304

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.8	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	3.7	B		P	
7439-89-6	Iron	64.1	B		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	0.6	U		P	UJ
57-12-5	Cyanide	3.0	U		AS	

11/15/04 PSH

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSWFB1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix: (soil / water) Water Lab Sample ID: 20311141305

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	0.3	U		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	1.2	U		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	0.6	U		P	UJ
57-12-5	Cyanide	3.0	U		AS	

11/25/03 mk

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SMSW521008
SW51

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix: (soil / water) Water Lab Sample ID: 20311141306

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.8	U		P	
7440-39-3	Barium	42.5	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	3.2	B		P	
7439-89-6	Iron	83.8	B		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	0.6	U		P	45
57-12-5	Cyanide	3.0	U		AS	

11/15/03 MSA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW531008
SW52

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix: (soil / water) Water Lab Sample ID: 20311141307

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	41.2	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	3.3	B		P	
7439-89-6	Iron	79.6	B		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	0.6	U		P	US
57-12-5	Cyanide	3.0	U		AS	

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW511008 (DISS)
SW50

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix (soil / water): Water Lab Sample ID: 20311141308

Level: (low / med): Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.0	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	4.4	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	0.6	U		P	WS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW511008 DUP (DISS)

SW50

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix: (soil / water) Water Lab Sample ID: 20311141310

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	42.1	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	4.2	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.9	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	46.1		*	P	J

11/25/03 MSK

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSWFB1008 (DISS)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix (soil / water) Water Lab Sample ID: 20311141311

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	3.7	U		P
7440-38-2	Arsenic	2.9	U		P
7440-39-3	Barium	0.3	B		P
7440-41-7	Beryllium	0.1	U		P
7440-43-9	Cadmium	0.2	U		P
7440-47-3	Chromium	0.9	U		P
7440-50-8	Copper	1.6	B		P
7439-89-6	Iron	14.1	U		P
7439-92-1	Lead	1.5	U		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.7	U		P
7782-49-2	Selenium	4.4	U	N	P
7440-22-4	Silver	0.4	U		P
7440-28-0	Thallium	2.6	U		P
7440-66-6	Zinc	0.6	U		P

R

US

11/21/03

Color Before: COLORLESS Clarity Before CLEAR Texture:

Color After: COLORLESS Clarity After CLEAR Artifacts:

Comments:

FORM I - IN

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW521008 (DISS)
SW51

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix: (soil / water) Water Lab Sample ID: 20311141312

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	3.2	B		P	
7440-39-3	Barium	42.2	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	5.1	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	0.6	U	*	P	US

11/20/03 mcc

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKSW531008 (DISS)
SW52

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Matrix: (soil / water) Water Lab Sample ID: 20311141313

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.7	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.8	U		P	
7440-50-8	Copper	3.7	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	J		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	1.5	B		P	J

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I IN ILM04.1

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only	Client Name	Client #	Workorder #	Due Date
	Earth Tech	4342	~~2031114 13~~ ~~2031113 11~~	11-28-03

Report to:
Client: Earth Tech
Address: 200 Vine Street
Hillsdale, Ky 41076
Contact: Pat Higgins
Phone: 859 442 7500
Fax: 859 442 2311

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54280.01
Project Name/Number: Stinner Landfill 4th Qtr. 2003
Sampled By: Derek Coggs & Pat Higgins

Analytical Requests & Method

Lab use only:
Custody Seal used ☑ yes ☐ no
in tact ☑ yes ☐ no
Temperature °C 4

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Semi Volatiles	Volatiles	TCLP	Pest/Herbicides	Total Metals	Dissolved Metals	Cyanide	Lab ID	Remarks:
W	11/13	1115		X	SKSW51 1005		7	X		X	X	X	X	X	11/14 (DS) -01	Refer to table 7.0 (tcl) and table 9 8(tcl) of final O&M plan for list of analytes
W	11/13	1122		X	SKSW51MS 1008		7	X		X	X	X	X	X	-02	

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Derek Coggs			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Fed Ex 9425 9530 8310	Laura Hurd	11-14-03	0930
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note: Fed Ex 9425 9530 8310

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix[1]: W = water, S = soil, SD = solid, L = liquid, SL = sludge, O = oil, C = charcoal, A = air, bag

We cannot accept verbal changes. Please fax written changes to (X

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL-06 (rev. 98)

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only

Client Name	Client #	Workorder #	Due Date
Earth Tech	4342	203111413	11-28-03

Report to:

Client: Earth Tech
Address: 200 Line Street
Wylder Ky 41076
Contact: Pat Hawkins
Phone: 859 442 2500
Fax: 859 442 2511

Bill to:

Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54250.01
Project Name/Number: Skinner Landfill 4th Qtr 2003
Sampled By: Derek Capps & Pat Hawkins

Analytical Requests & Method

Lab use only:
Custody Seal
used ☑ yes ☐ no
in tact ☑ yes ☐ no
Temperature °C 5

Matrix*	Date	Time (2400)	Lab #	Grab	Sample Description	Preservatives	No Containers	Semi-Volatiles	Volatiles	PCB's	Pesticides	Total Metals	Dissolved metals	Cyanide
W	11/13	1140		X	SKSW51MSD1103		7	X		X	X	X	X	X
W	11/13	1245		X	SKSWFB1103		7	X		X	X	X	X	X

Remarks: (Diss) Refer to table 10 7(n1) and -11 table 8(to1) of final O&M Plan for list of analytes

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☑ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Derek L. Capps			
Relinquished by: (Signature)	Received by: (Signature)	Date: 11-14-03	Time: 0730
Fed Ex 842515308310	Dana Taylor		
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note: Fed Ex 5425 9550 8310

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

0055

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only	Client Name	Client #	Workorder #	Due Date
	Earth Tech	4342	203111413	11-28-03

Report to:
Client: Earth Tech
Address: 200 Vine Street
Wilder, KY 41076
Contact: Pat Higgins
Phone: 859 442 2500
Fax: 859 442 2511

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 52280.01
Project Name/Number: Skinner Landfill 4th Qtr. 2003
Sampled By: Derek Lopez & Pat Higgins

Analytical Requests & Method: Semi-Volatiles; Volatiles; VOCs; Pesticides; Total Metals; Dissolved Metals; Cyanide

Lab use only:
Custody Seal used ☑ yes ☐ no
Custody Seal in tact ☑ yes ☐ no
Temperature °C 4

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Lab ID
W	11/13	11:55		X	SKSW52 1008		7	11114-06
W	11/13	12:12		X	SKSW53 1008		7	11114-07

Remarks: (Dissolved) Refer to table 1, 7 (TCL) and table 8 (TAL) of final QAP plan for list of analytes

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Paul J. Cooper			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
FedEx 8425 9530 8310	Laura Hudd	11-14-03	0930
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note: FedEx 8425 9530 8310

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix[1]: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (225) 767-5717

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL 36 11/98

000538

CHAIN OF CUSTODY RECORD

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

Lab use only: Earth Tech | Client Name | 4342 Client # | 203111413 Workorder # | 11-28-03 Due Date

Report to:		Bill to:	
Client:	Earth Tech	Client:	
Address:	3?? Vine Street	Address:	Same
	??? Ky 40??		
Contact:	Bill Higgins	Contact:	
Phone:	859 442 2800	Phone:	
Fax:	859 442 2311	Fax:	

P.O. Number: 22980.01
Project Name/Number: Skinner Landfill 4th Qtr 2003
Sampled By: David ? & Bill Higgins

Analytical Requests & Method: semi volatiles | volatiles | PCBs | Pesticides | total metals | dissolved metals | cyanide

Matrix	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No. Containers	semi volatiles	volatiles	PCBs	Pesticides	total metals	dissolved metals	cyanide	Remarks	Lab ID
W	11/3	[illegible]		X	SKSWFB 1008		10	X	X	X	X	X	X	X	Refer to table 7 (TCL) and table 8 (TAL) of final QAPP plan for list of analytes	*
W	11/3	[illegible]		X	SKSW?? 1008		3		X							-01
W	11/3	[illegible]		X	SKSW??? 1008		3		X							-02
W	11/3	[illegible]		X	SK???? 1008		[illegible]		X							-03
W	11/3	[illegible]		X	SKSW?? 1008		3		X							-04
W	11/3	[illegible]		X	SKSW?? 1008		3		X							-04
W	11/3	[illegible]		X	SKGW58 1008		3		X							*
W	11/3	[illegible]		X	SKGW58FD 1008		3		X							*
W	11/3			X	SKGWTB 1008		3		X							*
W	11/3	[illegible]		X	SKSWFB		3		X						Standard TAT	-05

Lab use only: Custody Seal used ☐ yes ☐ no; in tact ☑ yes ☐ no; Temperature °C 5

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☐ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature] 11/3/03 4:00			
Fed Ex 842595308310	[signature]	11/4/03	0930

Note: *Samples are in separate work order. Fed Ex 8425 9530 8310

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

000559

SWD-3
(not SWD-32)

DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 20312150701

PROJECT MANAGER: Ron Rolker

Date: February 2, 2004

Data Validator: Mark Kromis

APPENDIX C
LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 20312150701 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 20312150701.

GCAL #	Sample Description
20312150701-01	SKSWD521008
20312150701-02	SKSWD52DUP1008
20312150701-05	SKSWD521008 DISS
20312150701-06	SKSWD52DUP1008 DISS

INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Calibration
   A. Initial Calibration (IC)
   B. Continuing Calibration (CC)
3. Blanks
4. Inductively Coupled Plasma (ICP) Interference Check Sample
5. Laboratory Control Sample (LCS)
6. Duplicate Analysis
7. Spike Sample Analysis
8. ICP Serial Dilution
9. System Performance
10. Documentation
11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. DUPLICATE ANALYSIS

The Relative Percent Difference (RPD) between the sample and duplicate results were within the acceptance criteria for all target compounds.

7. SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSWD521008 for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total and dissolved fractions with the exception of Mercury (47%). As per the National Functional Guidelines: if the percent recovery is greater than 30% and less than 74% qualify detected results for that analyte with "J" and non-detected results with "UJ".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects.

The percent differences were within the acceptance criteria for all target analytes with the exception of Zinc. As per the National Functional Guidelines if the percent difference criteria is not met qualify the associated results with "J".

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

The documentation appeared accurate and in order.

11. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 20312150701 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 20312150701.

GCAL #	Sample Description
20312150701-01	SKSWD521008
20312150701-02	SKSWD52DUP1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   A. IC
   B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV2. One decafluorotriphenylphosphine (DFTPP) tune was run representing the shift in which the standards and samples were analyzed. The DFTPP tune is acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 12/24/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes. The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of 2,4,6-Trichlorophenol (31.0%), 2,4-Dinitrophenol (32.2%), and Diethylphthalate (41.0%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 15.1%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for 2,4,6-Trichlorophenol and the %RSD was recalculated. The recalculated %RSD was 7.2%, which is within the acceptance criteria of less than 30%. The 2,4,6-Trichlorophenol results greater than 160 ppb will be qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

One CC dated 12/24/03 was analyzed in support of the semivolatile sample analyses reported in the data submissions. The RRF's for the CC dated 11/24/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 11/26/03 were within the acceptance criteria with the exception the %D for 2,4-Dintrophenol. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

4. BLANKS

One laboratory semivolatile method blank was analyzed with this SDG. The results are summarized below.

Method Blank (MB136362)

Di-n-butyl phthalate (1.8 ppb) was detected in the method blank extracted on 12/16/03. The results for Di-n-butyl phthalate less than 18 ppb were qualified with "U" for samples extracted with method blank 136362. Bis (2-Ethylhexyl) phthalate (0.956 J ppb) was also detected in the method blank extracted on 12/16/03. The results for bis (2-Ethylhexyl) phthalate less than 9.56 ppb were qualified with "U" for samples extracted with method blank 136632.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)

There were no samples submitted for MS/MSD analysis during this sampling event.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low-level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction analysis of the surface water samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate was mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 20312150701 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 20312150701.

GCAL #	Sample Description
20312150701-01	SKSWD521008
20312150701-02	SKSWD52DUP1008
20312150701-03	SKSWD52FB1008
20312150701-04	SKSWD52TB1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit.

However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   A. IC
   B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Laboratory Control Sample
8. Internal Standards Performance
9. Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. System Performance
12. Documentation
13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. One bromofluorobenzene (BFB) tune was run. The BFB tune was acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 12/16/03 was analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes. The RRF's and the average RRF for the IC dated 11/17/03 were within the acceptance criteria specified in the method for all target analytes with the exception of trans-1,2-Dichloroethene, Acetone, and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R). The analyte 1,2-Dichloroethene as reported by GCAL consists of the summation of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene. The RRF for cis-1,2-Dichloroethene were within the acceptance criteria therefore the data validator qualified the total 1,2-Dichloroethene result with "UJ" instead of rejecting the result.

B. Continuing Calibration

One CC dated 12/16/03 was analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions. The percent difference (%D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of trans-1,2-Dichloroethene, Acetone and 2-Butanone. The trans-1,2-Dichloroethene, Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

One laboratory volatile method blank, storage blank, Trip Blank, and a Field Blank were analyzed with this SDG. The results are summarized below.

Method Blank

MB136071 (12/16/03)

Chloroform was detected at a concentration of 0.57 ppb in the method blank analyzed on 12/16/03.

Storage Blank (VHBLK01)

Chlorobenzene (0.63 ppb) and Acetone (1.9 ppb) were detected in the storage blank analyzed on 12/16/03

Trip Blank (SKSWD52TB1008)

There were no target analytes detected in the Trip Blank dated 12/11/03.

Field Blank (SKSWD52FB1008)

Acetone (16 ppb), Benzene (0.11 ppb), Methylene chloride (30 ppb), and Styrene (0.63 ppb) were detected in the Field Blank collected on 12/11/03.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

A LCS/LCS duplicate were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. DOCUMENTATION

The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 20312150701 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 20312150701.

GCAL #	Sample Description
20312150701-01	SKSWD521008
20312150701-02	SKSWD52DUP1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3. IC
4. Calibration Verification
5. Blanks
6. Surrogate Spikes
7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
8. Pesticide Cleanup Checks
9. Target Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. There were no target analyte detected in the associated samples therefore data qualification was not warranted.

The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20% with the exception of 4,4'-DDT (21.6%). As per the National Functional Guidelines up to two single component target pesticides (other than the surrogates) per column may exceed the 20.0 percent limit but the %RSD must be less than or equal to 30.0 percent.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 136076

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 12/16/03

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

There were no samples submitted for MS MSD analysis during this sampling event.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. *National Functional Guidelines for Inorganic Data Review.*

US EPA, 1999. *National Functional Guidelines for Organic Data Review.*

NELAP CERTIFICATE NUMBER 01955

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/30/2003

GCAL Report 203121

Deliver To	Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300
Attn	Pat Higgins

Customer Earth Tech

Project Skinner Landfill

000001

CASE NARRATIVE

Client: Earth Tech **Report:** 203121507

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the OLC02.1 - CLP Volatiles analysis, sample 20312150703 (SKSWD52FB1008) had to be diluted due to compounds that were detected above the linear range of the calibration.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the analysis of RESC01 on column-2, there was no resolution between Methoxychlor and Endosulfan Sulfate. There was no target analysis present in the associated samples. All peaks resolved on the primary column.

METALS

Zinc is flagged as estimated for samples associated with prep batch 266831 due to the fact that the percent difference between the original sample result and the serial dilution result is greater than ten. A chemical or physical interference is suspected.

In the Mercury analysis for prep batch 266832, the MS recovery was outside the control limits. The LCS recovery was within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

MISCELLANEOUS

Sample 20312150705 (SKSWD521008 (DISSOLVED)) had to be preserved at the laboratory with Nitric Acid.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reporduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Curtis Ekker

CURTIS EKKER
DATA VALIDATION MANAGER
GCAL REPORT 203121507

THIS REPORT CONTAINS 328 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20312150701	SKSWD521008	Water	12/11/2003 13:52	12/13/2003 12:15
20312150702	SKSWD52DUP1008	Water	12/11/2003 15:05	12/13/2003 12:15
20312150703	SKSWD52FB1008	Water	12/11/2003 15:05	12/13/2003 12:15
20312150704	SKSWD52TB1008	Water	12/11/2003 00:00	12/13/2003 12:15
20312150705	SKSWD521008 (DISSOLVED)	Water	12/11/2003 13:52	12/13/2003 12:15
20312150706	SKSWD52DUP1008 (DISSOLVED)	Water	12/11/2003 15:05	12/13/2003 12:15

SWD-3

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWD521008 SWD-3

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20312150701

Level: (low/med) | Lab File ID: 2031216/T1263

% Moisture: not dec. | Date Collected: 12/11/03 | Time: 1352

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 12/13/03

Instrument ID: MSV2 | Date Analyzed: 12/16/03 | Time: 1651

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	UI
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSMD521096 SAD-3

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 20312507

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20312150701

Level: (low/med) | Lab File ID: 2031216/T1263

% Moisture: not dec. | Date Collected: 12/11/03 | Time: 1352

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 12/13/03

Instrument ID: MSV2 | Date Analyzed: 12/16/03 | Time: 1651

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKSWD521008
SWD-3

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203121507

Matrix: Water Lab Sample ID: 20312150701

Sample wt/vol: Units: Lab File ID: 2031216/T1263

Level: (low/med) Date Collected: 12/11/03 Time: 1352

% Moisture: not dec. Date Received: 12/13/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 12/16/03 Time: 1651

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: *1*

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	7446-09-5	Sulfur dioxide	1.443	432	

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SWDS2DUP1038 SED-3

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20312150702

Level: (low/med) | Lab File ID: 2031216/T1265

% Moisture: not dec. | Date Collected: 12/11/03 | Time: 1505

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 12/13/03

Instrument ID: MSV2 | Date Analyzed: 12/16/03 | Time: 1739

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	UJ
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWD52DUP1008 SWD-03

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20312150702

Level: (low/med) | Lab File ID: 2031216/T1265

% Moisture: not dec. | Date Collected: 12/11/03 | Time: 1505

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 12/13/03

Instrument ID: MSV2 | Date Analyzed: 12/16/03 | Time: 1739

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

Analytical Method: OLC02.1 - CLP Vo

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SKS-MD52DUP1008

SDG-3

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203121507

Matrix: Water Lab Sample ID: 20312150702

Sample wt/vol: Units: Lab File ID: 2031216T1265

Level: (low/med) Date Collected: 12/11/03 Time: 1505

% Moisture: not dec. Date Received: 12/13/03

GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 12/16/03 Time: 1739

Instrument ID: MSV2 Dilution Factor: 1 Analyst: RSP

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 1

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	7446-09-5	Sulfur dioxide	1.443	366	

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWD52FB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20312150703

Level: (low/med) | Lab File ID: 2031216/T1266

% Moisture: not dec. | Date Collected: 12/11/03 | Time: 1505

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 12/13/03

Instrument ID: MSV2 | Date Analyzed: 12/16/03 | Time: 1804

Concentratedl Extract Volume: (µL) | Dilution Factor: 2 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	
75-34-3	1,1-Dichloroethane	2.0	U	2.0	
75-35-4	1,1-Dichloroethene	2.0	U	2.0	
120-82-1	1,2,4-Trichlorobenzene	2.0	U	2.0	
106-93-4	1,2-Dibromoethane	2.0	U	2.0	
95-50-1	1,2-Dichlorobenzene	2.0	U	2.0	
107-06-2	1,2-Dichloroethane	2.0	U	2.0	
540-59-0	1,2-Dichloroethene	2.0	U	2.0	UJ
78-87-5	1,2-Dichloropropane	2.0	U	2.0	
541-73-1	1,3-Dichlorobenzene	2.0	U	2.0	
106-46-7	1,4-Dichlorobenzene	2.0	U	2.0	
78-93-3	2-Butanone	10	U	10	R
591-78-6	2-Hexanone	10	U	10	
108-10-1	4-Methyl-2-pentanone	10	U	10	
67-64-1	Acetone	16		10	J
71-43-2	Benzene	0.11	J	2.0	
75-27-4	Bromodichloromethane	2.0	U	2.0	
75-25-2	Bromoform	2.0	U	2.0	
74-83-9	Bromomethane	2.0	U	2.0	
75-15-0	Carbon disulfide	2.0	U	2.0	
56-23-5	Carbon tetrachloride	2.0	U	2.0	
108-90-7	Chlorobenzene	2.0	U	2.0	
75-00-3	Chloroethane	2.0	U	2.0	
67-66-3	Chloroform	2.0	U	2.0	
74-87-3	Chloromethane	2.0	U	2.0	
124-48-1	Dibromochloromethane	2.0	U	2.0	
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	
100-41-4	Ethylbenzene	2.0	U	2.0	
75-09-2	Methylene chloride	30		4.0	
100-42-5	Styrene	0.63	J	2.0	

2/5/04 mc

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SFSWD52FB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20312150703

Level: (low/med) | Lab File ID: 2031216/T1266

% Moisture: not dec. | Date Collected: 12/11/03 | Time: 1505

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 12/13/03

Instrument ID: MSV2 | Date Analyzed: 12/16/03 | Time: 1804

Concentrated Extract Volume: (µL) | Dilution Factor: 2 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	2.0	U	2.0
108-88-3	Toluene	2.0	U	2.0
79-01-6	Trichloroethene	2.0	U	2.0
75-01-4	Vinyl chloride	2.0	U	2.0
1330-20-7	Xylene (total)	2.0	U	2.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWD52TB1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20312150704

Level: (low/med) | Lab File ID: 2031216/T1262

% Moisture: not dec. | Date Collected: 12/11/03 | Time: 0000

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 12/13/03

Instrument ID: MSV2 | Date Analyzed: 12/16/03 | Time: 1627

Concentratedl Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

Analytical Method: OLC02.1 - CLP Vo

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	1.0	U	1.0	UJ
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	R
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWD52TB1308

Lab Code: L4024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 25 | Units: mL | Lab Sample ID: 20312150704

Level: (low/med) | Lab File ID: 2031216/T1262

% Moisture: not dec. | Date Collected: 12/11/03 | Time: 0000

GC Column: DB-624-30M | ID: .53 (mm) | Date Received: 12/13/03

Instrument ID: MSV2 | Date Analyzed: 12/16/03 | Time: 1627

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: RSP

Soil Aliquot Volume: (µL) | Prep Method:

CONCENTRATION UNITS: ug/L | Analytical Method: OLC02.1 - CLP Vo

CAS NO.	COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	U	1.0

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWD521008 SWD-3

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20312150701 | Lab File ID: 2031224/S

Level: (low/med) | Date Collected: 12/11/03 | Time: 1352

% Moisture: | decanted: (Y/N) | Date Received: 12/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/24/03 | Time: 1908

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	~~0.918~~ 10.0	J	10.0	UJ

1/5/04 msa

[illegible] ORGANICS DATA SHEET

SED-3

Lab Name: GCAL | Sample ID: SKSWD521008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 2031215C701 | Lab File ID: 2031224/S

Level: (low/med) | Date Collected: 12/11/03 | Time: 1352

% Moisture: | decanted: (Y/N) | Date Received: 12/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/24/03 | Time: 1908

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	10.49	J	10.0	JL
117-84-0	Di-n-octylphthalate	10.0	U	10.0	
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL

Lab Code: LA024 2 Case No.:

SAS No.: SDG No.: 203121507

Matrix: Water

Sample wt/vol: Units:

Level: (low/med)

% Moisture: not dec.

GC Column: DB-5MS-30M ID: .25 (mm)

Concentrated Extract Volume: (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH:

Sample ID: SKSWD521008 SW0-3

Contract:

Lab File ID: 2031224/S4407

Lab Sample ID: 20312150701

Date Collected: 12/11/03 Time: 1352

Date Received: 12/13/03

Date Extracted:

Date Analyzed: 12/24/03 Time: 1908

Dilution Factor: 1 Analyst: RLW

Prep Method:

Analytical Method: SW-846 8270C

Instrument ID: MSSV2

Number TICs Found : 2

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	626-97-1	Pentanamide	12.348	28.1	
2.	1120-16-7	Dodecanamide	13.952	46.5	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SHSWD52DUP1008

Lab Code: LAC24 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20312150702 | Lab File ID: 2031224/S

Level: (low/med) | Date Collected: 12/11/03 | Time: 1505

% Moisture: | decanted: (Y/N) | Date Received: 12/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/24/03 | Time: 1934

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	UJ
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	10.0	U	10.0	
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	10.0	U	10.0	

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWD52DUP1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20312150702 | Lab File ID: 2031224/S

Level: (low/med) | Date Collected: 12/11/03 | Time: 1505

% Moisture: | decanted: (Y/N) | Date Received: 12/13/03

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Analyzed: 12/24/03 | Time: 1934

Concentrated Sample Volume: 1000 (µL) | Dilution Factor: 1 | Analyst: RLW

Soil Aliquot Volume: (µL) | Prep Method:

Injection Volume: 2 (µL) | Analytical Method: OLMO 4.2

GPC Cleanup: (Y/N) N | pH: | Instrument ID: MSSV2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	
85-68-7	Butylbenzylphthalate	10.0	U	10.0	
86-74-8	Carbazole	10.0	U	10.0	
218-01-9	Chrysene	10.0	U	10.0	
84-74-2	Di-n-butylphthalate	~~10.0~~ 1.44	J	10.0	U
117-84-0	Di-n-octylphthalate	10.0	U	10.0	
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	
132-64-9	Dibenzofuran	10.0	U	10.0	
84-66-2	Diethylphthalate	10.0	U	10.0	
131-11-3	Dimethyl-phthalate	10.0	U	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	
87-68-3	Hexachlorobutadiene	10.0	U	10.0	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	
67-72-1	Hexachloroethane	10.0	U	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	
78-59-1	Isophorone	10.0	U	10.0	
91-20-3	Naphthalene	10.0	U	10.0	
100-01-6	4-Nitroaniline	25.0	U	25.0	
98-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenol	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	10.0	U	10.0	
129-00-0	Pyrene	10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	10.0	U	10.0	

2/5/04

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL
Lab Code: UA024 2 Case No.:
SAS No.: SDG No.: 203121507
Matrix: Water
Sample wt/vol: Units
Level: (low/med)
% Moisture: not dec.
GC Column: DB-5MS-30M ID: 25 (mm)
Concentrated Extract Volume: (µL)
Injection Volume: 1.0 (µL)
GPC Cleanup: (Y/N) N pH:

Sample ID: SKSWD52DUP1008
Contract:
Lab File ID: 2031224/S4408
Lab Sample ID: 203121507C2
Date Collected: 12/11/03 Time: 1505
Date Received: 12/13/03
Date Extracted:
Date Analyzed: 12/24/03 Time: 1934
Dilution Factor: 1 Analyst: RLW
Prep Method:
Analytical Method: SW-846 8270C
Instrument ID: MSSV2

Number TICs Found : 2

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	626-97-1	Pentanamide	12.34	39	
2.	1120-16-7	Dodecanamide	13.95	56.9	

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med)

% Moisture: decanted: (Y/N)

GC Column: RTX-50-30M ID: .53 (mm)

Concentrated Extract Volume: (µL)

Injection Volume: (µL)

GPC Cleanup: (Y/N) N pH:

Sample ID: SKSWD521008 SWD-3

Contract:

SAS No.: SDG No.: 203121507

Lab Sample ID: 20312150701

Date Collected: 12/11/03 Time: 1352

Date Received: 12/13/03

Date Analyzed: 12/25/03 Time: 0105

Dilution Factor: 1 Analyst: DLB

Prep Method:

Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A

Lab File ID: 2031224/SV1101

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: SKSWD52DUP1008

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 203121507

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 20312150702

Level: (low/med) | Date Collected: 12/11/03 | Time: 1505

% Moisture: | decanted: (Y/N) | Date Received: 12/13/03

GC Column: RTX-50-30M | ID: .53 (mm) | Date Analyzed: 12/25/03 | Time: 0134

Concentrated Extract Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N | Instrument ID: GCS11A

Lab File ID: 2031224/SV1102

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4,4'-DDD	0.100	U	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-DDT	0.100	U	0.100
309-00-2	Aldrin	0.050	U	0.050
12674-11-2	Aroclor-1016	1.00	U	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	U	1.00
11097-69-1	Aroclor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan I	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachlor	0.050	U	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.050
72-43-5	Methoxychlor	0.500	U	0.500
8001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.050
319-85-7	beta-BHC	0.050	U	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.050

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203121507

SOW No.:

	EPA Sample No.	Lab Sample ID.
SWD-3	SKSWD521008	20312150701
	SKSWD52DUP1008	20312150702
	SKSWD521008 (DISSOLVED)	20312150705
	SKSWD52DUP1008 (DISSOLVED)	20312150706

Were ICP interelement corrections applied ?	Yes / No	YES
Were ICP background corrections applied ?	Yes / No	YES
If yes-were raw data generated before application of background corrections ?	Yes / No	NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness for other than the conditions detailed above. Release of this data contained in this hardcopy data package and in the computer readable data submitted on the diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Shelley Bourgeois Name: Shelley Bourgeois

Date: 1-7-04 Title: Inorganic Manager

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSWD521008
SAD-3

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203121507

Matrix: (soil / water) Water Lab Sample ID: 20312150701

Level: (low / med) Date Received: 12/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	37.0	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	1.0	B		P	
7440-50-8	Copper	14.8	B		P	
7439-89-6	Iron	155			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U	N	AV	UT
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U		P	
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	32.6		E	P	J
57-12-5	Cyanide	3.0	U		AS	

2/16/04 msa

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSWD52DUP1008

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203121507

Matrix: (soil / water) Water Lab Sample ID: 20312150702

Level: (low / med) Date Received: 12/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	37.4	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	1.1	B		P	
7440-50-8	Copper	10.3	B		P	
7439-89-6	Iron	211			P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U	N	AV	UJ
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U		P	
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	35.7		E	P	J
57-12-5	Cyanide	3.0	U		AS	

2/6/04 mk

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKSWD521008 (DISSOLVE
SWD-3

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203121507

Matrix (soil / water): Water Lab Sample ID: 203121507O5

Level (low / med): Date Received: 12/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.1	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	1.4	B		P	
7440-50-8	Copper	10.4	B		P	
7439-89-6	Iron	59.0	B		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U	N	AV	UJ
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U		P	
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.5	U		P	
7440-66-6	Zinc	91.6		E	P	J

2 holds MSA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
SKSWD52DUP1008 (DISSO

Lab Name: GCAL Contract:
Lab Code: LA024 Case No.: SAS No.: SDG No.: 203121507
Matrix: (soil / water) Water Lab Sample ID: 20312150706
Level: (low / med) Date Received: 12/13/03
% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	37.4	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-47-3	Chromium	0.9	B		P	
7440-50-8	Copper	7.8	B		P	
7439-89-6	Iron	46.1	B		P	
7439-92-1	Lead	1.5	U		P	
7439-97-6	Mercury	0.1	U	N	AV	US
7440-02-0	Nickel	0.7	U		P	
7782-49-2	Selenium	4.4	U		P	
7440-22-4	Silver	0.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	33.9		E	P	J

3/16/04 MSE

Color Before: COLORLESS Clarity Before: CLEAR Texture:
Color After: COLORLESS Clarity After: CLEAR Artifacts:
Comments:

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only	Client Name	Client #	Workorder #	Due Date
	Earth Tech	4342	2031215 07	12-29-03

Report to:
Client: Earth Tech
Address: 300 Vine Street
Wilder, Ky 41076
Contact: Pat Higgins
Phone: 859 442 2300
Fax: 859 442 2311

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 5480.01
Project Name/Number: Skinner Landfill
Sampled By:

Analytical Requests & Method: Semi Volatiles; Volatiles; PCBs; Pesticides; total metals; dissolved metals; cyanide

Matrix	Date	Time (2400)	comp	grab	Sample Description	Preservatives	No Containers	Semi Volatiles	Volatiles	PCBs	Pesticides	total metals	dissolved metals	cyanide	Remarks	Lab ID
W	12/11	1357		X	~~SKGWS52~~ SKSWD pmh 52 1008		6	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	DLH 12/15/03	12.19 -01
W	12/11	1505		X	~~SKGWS52~~ SKSWD pmh 52 1008 Dup.			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		-02
W	12/11	1505			SKSWD52FB1008				X							-03
					* SWD 52 TB1008				X							-04

Remarks: Refer to table 1 (+1) and table 5 (+1) of the [illegible] [illegible] plan for list of analytes

VOA only on this chain-of-custody.

Standard TAT

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	Dm Pml	12-13-03	1100
Dm Pml	[signature]	12-13-03	1815

Note: Fed Ex # 8425 9530 5521

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

GCAL 06 11/98

0003326

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC

NELAP CERTIFICATE NUMBER 01955

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/02/2003

GCAL Report 203111413

ADDENDUM

Deliver To	Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300
Attn	Pat Higgins

Customer Earth Tech

Project Skinner Landfill

CASE NARRATIVE

Client: Earth Tech **Report:** 203111413

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

SEMI-VOLATILES MASS SPECTROMETRY

In the semi-volatile analysis, 4-Nitrophenol was recovered above QC limits in the MS/MSD. 2,4-Dinitrotoluene was slightly above in the QC limit in the MSD.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the Pesticide analysis of the MS/MSD, the spike recovery for gamma-BHC was below QC limits. This is attributed to matrix interference.

In the analysis of RESC01 (resolution check), Methyoxychlor and Endosulfan Sulfate were not resolved on the confirmation column; however, all compounds were resolved on the initial column.

METALS

In the ILM04.1-CLP Metals analysis for prep batches 265578 and 265580, the MS recovery was outside the control limits for Selenium. The LCS recovery was within control limits. This indicates the analysis is control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0%.

Zinc is flagged with an "*" for samples associated with prep batch 265580 due to the fact that the absolute difference between the original sample result and the duplicated result is greater than the CRDL, and the sample and/or duplicate result is between the CRDL and 5X the CRDL.

In the ILM04.1-CLP Metals, Manganese is flagged as estimated for samples associated with prep batches 265578 and 265580 due to the fact that the percent difference between the original sample result and the serial dilution result is greater than 10. A chemical or physical interference is suspected.

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW511008
SO

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil / water) Water Lab Sample ID: 20311141301

Level: (low / med) _____ Date Received: 11/14/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	3.4	B		P	
7440-39-3	Barium	41.3	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	86400			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	4.4	B		P	
7439-89-6	Iron	69.2	B		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	23900			P	
7439-96-5	Manganese	5.8	B	E	P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3990	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	33000			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	1.3	B		P	J
57-12-5	Cyanide	3.0	U		AS	

in/b lot mss

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000411
RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW511008 MS
SO

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311141302

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2160			P	
7440-36-0	Antimony	106			P	
7440-38-2	Arsenic	40.1			P	
7440-39-3	Barium	2030			P	
7440-41-7	Beryllium	53.1			P	
7440-43-9	Cadmium	48.3			P	
7440-70-2	Calcium	86700			P	
7440-47-3	Chromium	205			P	
7440-48-4	Cobalt	490			P	
7440-50-8	Copper	253			P	
7439-89-6	Iron	1110			P	
7439-92-1	Lead	19.0			P	
7439-95-4	Magnesium	24000			P	
7439-96-5	Manganese	517		E	P	
7439-97-6	Mercury	5.9			AV	
7440-02-0	Nickel	488			P	
7440-09-7	Potassium	3960	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	51.5			P	
7440-23-5	Sodium	32600			P	
7440-28-0	Thallium	45.4			P	
7440-62-2	Vanadium	513			P	
7440-66-6	Zinc	497			P	I
57-12-5	Cyanide	96.7			AS	

10/6/05
MSB

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000412
RESUBMITTE

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW511008 DUP SD

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311141304

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.8	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	92700			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	3.7	B		P	
7439-89-6	Iron	64.1	B		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	24900			P	
7439-96-5	Manganese	5.7	B	F	P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	4100	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	34100			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U		P	UJ
57-12-5	Cyanide	3.0	U		AS	

10/16/03 MK

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000413

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSWFB1008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix (soil / water) Water Lab Sample ID: 20311141305

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	0.3	U		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	14.1	B		P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	1.2	U		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	36.7	U		P	
7439-96-5	Manganese	0.2	U	~~F~~	P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	42.1	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	45.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	2.9	B		P	
7440-66-6	Zinc	0.6	U		P	UJ
57-12-5	Cyanide	3.0	U		AS	

12/16/03 MSE

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000414

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW521008
S1

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil / water) Water Lab Sample ID: 20311141306

Level: (low / med) _____ Date Received: 11/14/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	42.6	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	86700			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	3.2	B		P	
7439-89-6	Iron	83.8	B		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	23900			P	
7439-96-5	Manganese	6.5	B	E	P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3820	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	32800			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U		P	UJ
57-12-5	Cyanide	3.0	U		AS	

solids mix

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000415

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW531008
S2

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil / water) Water Lab Sample ID: 20311141307

Level: (low / med) _____ Date Received: 11/14/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	41.2	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	84800			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	3.3	B		P	
7439-89-6	Iron	79.6	B		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	23300			P	
7439-96-5	Manganese	6.8	B	E	P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3710	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	32800			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U		P	UI
57-12-5	Cyanide	3.0	U		AS	

ioliios
MSR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000416
RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW511008 (DISS)
50

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil / water) Water Lab Sample ID: 20311141308

Level: (low / med) _____ Date Received: 11/14/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.0	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	84100			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.5	B		P	
7440-50-8	Copper	4.4	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	23400			P	
7439-96-5	Manganese	3.8	B	E	P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3840	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	32100			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U	J	P	UJ

10/16/03 MSL

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000417
RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW511008 MS (DISS)
SD

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311141309

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2080			P	
7440-36-0	Antimony	112			P	
7440-38-2	Arsenic	41.9			P	
7440-39-3	Barium	2060			P	
7440-41-7	Beryllium	53.9			P	
7440-43-9	Cadmium	47.9			P	
7440-70-2	Calcium	85800			P	
7440-47-3	Chromium	207			P	
7440-48-4	Cobalt	494			P	
7440-50-8	Copper	265			P	
7439-89-6	Iron	1050			P	
7439-92-1	Lead	19.7			P	
7439-95-4	Magnesium	23400			P	
7439-96-5	Manganese	520		E	P	
7439-97-6	Mercury	5.8			AV	
7440-02-0	Nickel	492			P	
7440-09-7	Potassium	3860	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	52.8			P	
7440-23-5	Sodium	32200			P	
7440-28-0	Thallium	42.7			P	
7440-62-2	Vanadium	521			P	
7440-66-6	Zinc	508		/	P	J

10/6/05
MR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000418

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW511008 DUP (DISS)
SO

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil / water) Water Lab Sample ID: 20311141310

Level: (low / med) _____ Date Received: 11/14/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	42.1	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	88000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.5	B		P	
7440-50-8	Copper	4.2	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	24100			P	
7439-96-5	Manganese	4.1	B	E	P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.9	B		P	
7440-09-7	Potassium	4050	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	33400			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	46.1		/	P	J

10/16/03 MSW

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSWFB1008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311141311

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	0.3	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	58.4	B		P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	1.6	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	36.7	U		P	
7439-96-5	Manganese	0.2	U	E	P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	42.1	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	45.4	U		P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	2.4	B		P	
7440-66-6	Zinc	0.6	U	J	P	J

10/6/05 mw

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000420

RESUBMITTED

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW521008 (DISS)
51

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311141312

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	3.2	B		P	
7440-39-3	Barium	42.2	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	88800			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	5.1	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	24700			P	
7439-96-5	Manganese	4.6	B	E	P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3910	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	34000			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U	/	P	UJ

10/6/05
MSV

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000421
RESUBMITTED

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW~~31~~52008 (DISS)

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil / water) Water Lab Sample ID: 20311141313

Level: (low / med) _____ Date Received: 11/14/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.7	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	86000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	3.7	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	23500			P	
7439-96-5	Manganese	5.0	B	E	P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3720	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	32900			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	1.5	B		P	J

10/16/03 mil

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000422

RESUBMITTED

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 11/21/03 Time: 1101

CRDL STANDARD

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Antimony	120	120	100	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	17.0	85	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.60	96	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	19.1	95	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	93.3	93	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	47.3	95	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	5.10	86	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	29.4	98	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	8.60	86	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.7	98	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	20.6	103	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	97.4	97	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	27.9	70	ug/L	ILM04.1 - CLP Metals	P

000427

RESUBMITTED

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 11/21/03 Time: 1419

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Antimony	120	124	103	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	18.2	91	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.20	92	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	19.8	99	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	95.0	95	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	47.6	95	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	5.40	90	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	29.4	98	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	76.4	96	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	11.8	118	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.6	98	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	16.6	83	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	102	102	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	27.9	70	ug/L	ILM04.1 - CLP Metals	P

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 11/21/03 Time: 1721

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Antimony	120	122	101	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	17.1	85	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.40	94	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.10	91	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	19.2	96	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	94.0	94	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	46.3	93	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	5.50	91	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	28.9	96	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	11.0	110	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.5	98	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	16.7	83	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	99.4	99	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	28.0	70	ug/L	ILM04.1 - CLP Metals	P

000428

RESUBMITTED

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 11/21/03 Time: 2024

CRDL STANDARD

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Antimony	120	122	102	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	18.9	95	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.00	90	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	19.3	97	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	94.1	94	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	47.2	94	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	5.30	89	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	29.3	98	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	13.9	139	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.5	98	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	20.8	104	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	100	100	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	28.3	71	ug/L	ILM04.1 - CLP Metals	P

RESUBMITTED

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111413

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 11/21/03 Time: 2212

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Antimony	120	123	103	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	17.2	86	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.60	96	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.10	91	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	19.4	97	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	94.6	95	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	49.1	98	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	5.40	90	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	29.6	99	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	75.9	95	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	16.4	164	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	20.2	101	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	24.0	120	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	101	101	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	28.1	70	ug/L	ILM04.1 - CLP Metals	P

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3

BLANKS

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Preparation Blank Matrix: (soil / water) Water

Preparation Blank Concentration Units: (ug/L / mg/kg) ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	-38.4	B	25.8	U	25.8	U	-44.3	B	-112.880	B	P
Antimony	3.7	U	6.7	B	3.7	U	6.2	B	3.700	U	P
Arsenic	2.9	U	2.9	U	-3.1	B	2.9	U	-3.246	B	P
Barium	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Beryllium	0.2	B	0.2	B	0.1	U	0.1	U	0.100	U	P
Cadmium	0.2	U	0.2	U	-0.3	B	0.2	U	-0.252	B	P
Calcium	7.5	U	7.5	U	7.5	U	7.5	U	9.394	B	P
Chromium	0.8	U	0.8	U	0.8	U	0.8	U	0.800	U	P
Cobalt	0.4	U	0.4	B	0.4	U	0.4	U	0.400	U	P
Copper	4.4	B	2.9	B	1.5	B	2.4	B	1.200	U	P
Iron	22.7	B	31.0	B	14.1	U	14.1	U	-18.128	B	P
Lead	1.5	B	1.5	U	1.5	U	1.5	U	1.500	U	P
Magnesium	40.3	B	92.0	B	39.8	B	96.1	B	41.668	B	P
Manganese	0.2	U	0.2	U	-0.5	B	0.2	U	0.200	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	AV
Nickel	0.8	B	0.7	B	0.7	U	0.7	U	0.700	U	P
Potassium	42.1	U	42.1	U	42.1	U	42.1	U	42.100	U	P
Selenium	4.4	U	4.4	U	4.4	U	4.4	U	4.400	U	P
Silver	0.4	U	-1	B	0.4	U	-1	B	-1.097	B	P
Sodium	-126.2	B	-159.2	B	-220.2	B	-200.4	B	-237.12	B	P
Thallium	3.5	B	2.6	U	2.6	U	2.6	U	2.600	U	P
Vanadium	0.8	U	0.8	U	4.1	B	3.0	B	3.448	B	P
Zinc	-7.7	B	-8.9	B	-11.9	B	-11.1	B	-10.483	B	P
Cyanide	3.0	U	3.0	U	3.0	U			3.000	U	AS

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3

BLANKS

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Preparation Blank Matrix: (soil / water) Water

Preparation Blank Concentration Units: (ug/L / mg/kg) ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 4	C	5	C	6	C	Prepa-ration Blank	C	M
Aluminum			-94.3	B	-70.8	B	-73.0	B	-84.452	B	P
Antimony			3.7	U	7.7	B	3.7	U	6.807	B	P
Arsenic			2.9	U	2.9	U	2.9	U	2.900	U	P
Barium			0.3	U	0.3	U	0.3	U	0.669	B	P
Beryllium			0.1	U	0.1	U	0.1	U	0.100	U	P
Cadmium			-0.3	B	0.2	U	0.2	U	-0.276	B	P
Calcium			13.9	B	7.5	U	7.5	U	7.500	U	P
Chromium			0.8	U	0.8	U	0.8	U	0.800	U	P
Cobalt			0.4	U	0.4	U	0.4	U	0.600	B	P
Copper			1.2	B	4.9	B	2.4	B	2.432	B	P
Iron			14.1	U	14.1	U	14.1	U	14.100	U	P
Lead			1.5	U	1.5	U	1.5	U	1.500	U	P
Magnesium			-70.7	B	36.7	U	-61.5	B	36.700	U	P
Manganese			0.2	U	0.2	U	-0.2	B	-0.207	B	P
Mercury			0.1	U	0.1	U	0.1	U	0.100	U	AV
Nickel			0.7	U	0.7	U	0.7	U	0.700	U	P
Potassium			42.1	U	42.1	U	42.1	U	42.100	U	P
Selenium			4.4	U	4.4	U	4.4	U	4.400	U	P
Silver			-0.7	B	0.4	U	-0.4	B	-0.611	B	P
Sodium			-236.5	B	-211.9	B	-249.7	B	-324.28	B	P
Thallium			2.6	U	2.6	U	-4.0	B	2.600	U	P
Vanadium			4.0	B	3.1	B	3.5	B	3.086	B	P
Zinc			-11.9	B	-10.5	B	-12.1	B	-11.280	B	P
Cyanide											AS

000432

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BLANKS

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Preparation Blank Matrix: (soil / water) _____

Preparation Blank Concentration Units: (ug/L / mg/kg) _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 7	C	8	C	9	C	Prepa-ration Blank	C	M
Aluminum			-66.0	B	-66.1	B					P
Antimony			9.7	B	11.4	B					P
Arsenic			-3.1	B	2.9	U					P
Barium			0.3	U	0.3	U					P
Beryllium			0.1	B	0.1	B					P
Cadmium			0.2	U	0.2	U					P
Calcium			7.5	U	10.1	B					P
Chromium			0.8	U	0.8	U					P
Cobalt			0.6	B	0.4	B					P
Copper			6.6	B	5.9	B					P
Iron			14.1	U	14.1	U					P
Lead			1.5	U	1.5	U					P
Magnesium			36.7	U	44.7	B					P
Manganese			0.2	U	0.2	U					P
Mercury											AV
Nickel			0.7	U	0.7	U					P
Potassium			42.1	U	42.1	U					P
Selenium			4.4	U	4.4	U					P
Silver			-0.8	B	-0.6	B					P
Sodium			-320.5	B	-331.0	B					P
Thallium			2.6	U	2.6	U					P
Vanadium			2.9	B	3.0	B					P
Zinc			-9.6	B	-9.4	B					P
Cyanide											AS

MS/MSD RECOVERY

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No: SKSW511008

SAMPLE NO. : 20311141302

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	*#*	*QC. LIMITS*
Aluminum	ug/L	2000	25.8	2160	108		75 - 125
Antimony	ug/L	100	3.7	106	106		75 - 125
Arsenic	ug/L	40	3.4	40.1	92		75 - 125
Barium	ug/L	2000	41.3	2030	99		75 - 125
Beryllium	ug/L	50	.1	53.1	106		75 - 125
Cadmium	ug/L	50	.2	48.3	97		75 - 125
Chromium	ug/L	200	.8	205	103		75 - 125
Cobalt	ug/L	500	.4	490	98		75 - 125
Copper	ug/L	250	4.4	253	99		75 - 125
Iron	ug/L	1000	69.2	1110	104		75 - 125
Lead	ug/L	20	1.5	19	95		75 - 125
Manganese	ug/L	500	5.8	517	102		75 - 125
Mercury	ug/L	5	.1	5.9	119		75 - 125
Nickel	ug/L	500	.7	488	98		75 - 125
Selenium	ug/L	10	4.4	4.4	0	N	75 - 125
Silver	ug/L	50	.4	51.5	103		75 - 125
Thallium	ug/L	50	2.6	45.4	91		75 - 125
Vanadium	ug/L	500	.8	513	103		75 - 125
Zinc	ug/L	500	1.3	497	99		75 - 125
Cyanide	ug/L	100	3	96.7	97		75 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 0 outside limits

Spike Recovery: 1 out of 20 outside limits

FORM V (PART 1) - IN

RESUBMITTED

MS/MSD RECOVERY

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No: SKSW511008 (DISS)

SAMPLE NO. : 20311141309

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	*#*	*QC. LIMITS*
Aluminum	ug/L	2000	25.8	2080	104		75 - 125
Antimony	ug/L	100	3.7	112	112		75 - 125
Arsenic	ug/L	40	2.9	41.9	105		75 - 125
Barium	ug/L	2000	40	2060	101		75 - 125
Beryllium	ug/L	50	.1	53.9	108		75 - 125
Cadmium	ug/L	50	.2	47.9	96		75 - 125
Chromium	ug/L	200	.8	207	104		75 - 125
Cobalt	ug/L	500	.5	494	99		75 - 125
Copper	ug/L	250	4.4	265	104		75 - 125
Iron	ug/L	1000	14.1	1050	105		75 - 125
Lead	ug/L	20	1.5	19.7	99		75 - 125
Manganese	ug/L	500	3.8	520	103		75 - 125
Mercury	ug/L	5	.1	5.8	116		75 - 125
Nickel	ug/L	500	.7	492	98		75 - 125
Selenium	ug/L	10	4.4	4.4	0	N	75 - 125
Silver	ug/L	50	.4	52.8	106		75 - 125
Thallium	ug/L	50	2.6	42.7	85		75 - 125
Vanadium	ug/L	500	.8	521	104		75 - 125
Zinc	ug/L	500	.6	508	102		75 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 1 out of 19 outside limits

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

SKSW511008PDS

Lab Name: PROJ AAH GCAL

Lab Code LA024 Case No.: _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

% Solids for Sample: Level: (low / med) _____

Concentration Units (ug/L or mg/kg dry weight) : ug/L

Analyte	Control Limit %R		Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
Aluminum			69.1	B	25.8	U		0		P
Antimony			122		3.7	U	120	102		P
Arsenic			21.7		3.4	B	20	92		P
Barium			41.7	B	.3	U		0		P
Beryllium			9.9		.1	U	10	99		P
Cadmium			8.3		.2	U	10	83		P
Calcium			87500		7.5	U		0		P
Chromium			19		.8	U	20	95		P
Cobalt			90.8		.4	U	100	91		P
Copper			53.4		4.4	B	50	98		P
Iron			87.2	B	14.1	U		0		P
Lead			3.9		1.5	U	6	65		P
Magnesium			24200		36.7	U		0		P
Manganese			34.6		5.8	B	30	96		P
Nickel			71		.7	U	80	89		P
Potassium			4080	B	42.1	U		0		P
Selenium			4.4	U	4.4	U	10	0		P
Silver			18.1		.4	U	20	91		P
Sodium			33400		45.4	U		0		P
Thallium			16.1		2.6	U	20	81		P
Vanadium			97.5		.8	U	100	98		P
Zinc			43.7		1.3	B	40	106		P

Comments:

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

SKSW511008 (DISS)PDS

Lab Name: PROJ AAH GCAL

Lab Code LA024 Case No.: Contract:

Matrix: (soil / water) Water SAS No.: SDG No.:

% Solids for Sample: Level: (low / med)

Concentration Units (ug/L or mg/kg dry weight) : ug/L

Analyte	Control Limit %R		Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
Aluminum			25.8	U	25.8	U		0		P
Antimony			124		3.7	U	120	103		P
Arsenic			18.6		2.9	U	20	93		P
Barium			40.6	B	.3	U		0		P
Beryllium			10		.1	U	10	100		P
Cadmium			8.6		.2	U	10	86		P
Calcium			84900		7.5	U		0		P
Chromium			19.5		.8	U	20	98		P
Cobalt			93.6		.5	B	100	93		P
Copper			53.9		4.4	B	50	99		P
Iron			14.1	U	14.1	U		0		P
Lead			5.2		1.5	U	6	87		P
Magnesium			23200		36.7	U		0		P
Manganese			33		3.8	B	30	97		P
Nickel			72.9		.7	U	80	91		P
Potassium			3820	B	42.1	U		0		P
Selenium			4.4	U	4.4	U	10	0		P
Silver			19.1		.4	U	20	95		P
Sodium			31800		45.4	U		0		P
Thallium			14.4		2.6	U	20	72		P
Vanadium			98.3		.8	U	100	98		P
Zinc			36.4		.6	U	40	91		P

Comments:

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DUPLICATES

EPA SAMPLE NO
SKSW511008 DUP

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No.: Contract:

Matrix: (soil / water) Water SAS No.: SDG No.:

Level: (low / med)

% Solids for Sample: % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight) ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	-	25.8	U	25.8	U	0		P
Antimony	-	3.7	U	3.7	U	0		P
Arsenic	-	3.4	B	2.9	U	200		P
Barium	-	41.3	B	40.8	B	1		P
Beryllium	-	.1	U	.1	U	0		P
Cadmium	-	.2	U	.2	U	0		P
Calcium	0 - 20	86400		92700		7		P
Chromium	-	.8	U	.8	U	0		P
Cobalt	-	.4	U	.4	U	0		P
Copper	-	4.4	B	3.7	B	17		P
Iron	-	69.2	B	64.1	B	8		P
Lead	-	1.5	U	1.5	U	0		P
Magnesium	0 - 5000	23900		24900		1000		P
Manganese	-	5.8	B	5.7	B	2		P
Mercury	-	.1	U	.1	U	0		AV
Nickel	-	.7	U	.7	U	0		P
Potassium	-	3990	B	4100	B	3		P
Selenium	-	4.4	U	4.4	U	0		P
Silver	-	.4	U	.4	U	0		P
Sodium	0 - 20	33000		34100		3		P
Thallium	-	2.6	U	2.6	U	0		P
Vanadium	-	.8	U	.8	U	0		P
Zinc	-	1.3	B	.6	U	200		P
Cyanide	-	3	U	3	U	0		AS

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DUPLICATES

EPA SAMPLE NO

SKSW511008 DUP (DISS)

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No.: _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

Level: (low / med) _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration Units (ug/L or mg/kg dry weight) ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	-	25.8	U	25.8	U	0		P
Antimony	-	3.7	U	3.7	U	0		P
Arsenic	-	2.9	U	2.9	U	0		P
Barium	-	40	B	42.1	B	5		P
Beryllium	-	.1	U	.1	U	0		P
Cadmium	-	.2	U	.2	U	0		P
Calcium	0 - 20	84100		88000		5		P
Chromium	-	.8	U	.8	U	0		P
Cobalt	-	.5	B	.5	B	0		P
Copper	-	4.4	B	4.2	B	5		P
Iron	-	14.1	U	14.1	U	0		P
Lead	-	1.5	U	1.5	U	0		P
Magnesium	0 - 5000	23400		24100		700		P
Manganese	-	3.8	B	4.1	B	8		P
Mercury	-	.1	U	.1	U	0		AV
Nickel	-	.7	U	.9	B	200		P
Potassium	-	3840	B	4050	B	5		P
Selenium	-	4.4	U	4.4	U	0		P
Silver	-	.4	U	.4	U	0		P
Sodium	0 - 20	32100		33400		4		P
Thallium	-	2.6	U	2.6	U	0		P
Vanadium	-	.8	U	.8	U	0		P
Zinc	0 - 20	.6	U	46.1		45.5		P

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LABORATORY CONTROL SAMPLE

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Solid LCS Source:

Aqueous LCS Source: 106-40-1 ~310006 HIGH PURITY~323

Analyte	Aqueous (ug/L)			Solid (mg/kg)			
	True	Found	% R	True	Found	C	% R
Aluminium	2000	2080	104				
Antimony	500	542	108				
Arsenic	2000	2120	106				
Barium	2000	2040	102				
Beryllium	50.0	54.0	108				
Cadmium	50.0	50.2	100				
Calcium	10000	10400	104				
Chromium	200	209	104				
Cobalt	500	506	101				
Copper	250	265	106				
Iron	1000	1060	106				
Lead	500	515	103				
Magnesium	10000	10600	106				
Manganese	500	521	104				
Nickel	500	513	103				
Potassium	10000	10300	103				
Selenium	2000	2120	106				
Silver	50.0	53.2	106				
Sodium	10000	10300	103				
Thallium	2000	2070	104				
Vanadium	500	525	105				
Zinc	500	496	99				

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LABORATORY CONTROL SAMPLE

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Solid LCS Source:

Aqueous LCS Source: 106-40-1 ~310006 HIGH PURITY~323

Analyte	Aqueous (ug/L)			Solid (mg/kg)			
	True	Found	% R	True	Found	C	% R
Aluminium	2000	2060	103				
Antimony	500	535	107				
Arsenic	2000	2090	104				
Barium	2000	2050	102				
Beryllium	50.0	54.2	108				
Cadmium	50.0	49.7	99				
Calcium	10000	10500	105				
Chromium	200	206	103				
Cobalt	500	498	100				
Copper	250	266	106				
Iron	1000	1040	104				
Lead	500	509	102				
Magnesium	10000	10500	105				
Manganese	500	523	105				
Nickel	500	504	101				
Potassium	10000	10600	106				
Selenium	2000	2090	104				
Silver	50.0	52.8	106				
Sodium	10000	10400	104				
Thallium	2000	2060	103				
Vanadium	500	528	106				
Zinc	500	502	100				

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

SKSW511008SD

Lab Name PROJ AAH GCAL

Lab Code: LA024 Case No. _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

Level: (low / med) _____

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	258	U	129	U			P
Antimony	37.0	U	18.5	U			P
Arsenic	3.4	B	14.5	U	326		P
Barium	41.3	B	42.6	B	3.1		P
Beryllium	1.0	U	0.5	U			P
Cadmium	2.0	U	1.0	U			P
Calcium	86400		88300		2.2		P
Chromium	8.0	U	4.0	U			P
Cobalt	4.0	U	2.0	U			P
Copper	4.4	B	6.0	U	36.4		P
Iron	69.2	B	70.5	U	1.9		P
Lead	15.0	U	7.5	U			P
Magnesium	23900		24500	B	2.5		P
Manganese	5.8	B	2.4	B	58.6	E	P
Nickel	7.0	U	3.5	U			P
Potassium	3990	B	3800	B	4.8		P
Selenium	44.0	U	22.0	U			P
Silver	4.0	U	2.0	U			P
Sodium	33000		30700		7		P
Thallium	26.0	U	13.0	U			P
Vanadium	8.0	U	11.9	B			P
Zinc	1.3	B	3.0	U	131		P

10/6/05
MSA

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

SKSW511008 (DISS)SD

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No. _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

Level: (low / med) _____

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	258	U	129	U			P
Antimony	37.0	U	18.5	U			P
Arsenic	29.0	U	14.5	U			P
Barium	40.0	B	40.0	B	0		P
Beryllium	1.0	U	0.5	U			P
Cadmium	2.0	U	1.0	U			P
Calcium	84100		84200		.1		P
Chromium	8.0	U	4.0	U			P
Cobalt	0.5	B	2.0	U	300		P
Copper	4.4	B	6.0	U	36.4		P
Iron	141	U	70.5	U			P
Lead	15.0	U	7.5	U			P
Magnesium	23400		22900	B	2.1		P
Manganese	3.8	B	1.0	U	73.7	E	P
Nickel	7.0	U	3.5	U			P
Potassium	3840	B	3470	B	9.6		P
Selenium	44.0	U	22.0	U			P
Silver	4.0	U	2.0	U			P
Sodium	32100		29400		8.4		P
Thallium	26.0	U	13.0	U			P
Vanadium	8.0	U	9.9	B			P
Zinc	6.0	U	3.0	U			P

10/6/05 mk

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: ICP5 Study Date: 04/30/03

Analyte	Wavelength (nm)	Background	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.210		200	25.8	P
Antimony	206.830		60	3.7	P
Arsenic	193.700		10	2.9	P
Barium	233.520		200	.3	P
Beryllium	313.100		5	.1	P
Cadmium	214.430		5	.2	P
Calcium	315.880		5000	7.5	P
Chromium	267.710		10	.8	P
Cobalt	228.610		50	.4	P
Copper	324.750		25	1.2	P
Iron	259.940		100	14.1	P
Lead	220.350		3	1.5	P
Magnesium	279.080		5000	36.7	P
Manganese	257.610		15	.2	P
Nickel	231.600		40	.7	P
Potassium	766.480		5000	42.1	P
Selenium	196.030		5	4.4	P
Silver	328.060		10	.4	P
Sodium	589.580		5000	45.4	P
Thallium	190.800		10	2.6	P
Vanadium	290.880		50	.8	P
Zinc	213.860		20	.6	P

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ANALYSIS RUN LOG

Lab Name: PROJ AAH CCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Instrument ID Number: ICP5 Method Type: P

Start Date: 11/21/03 End Date: 11/21/03

				Analyte Symbols																							
EPA Sample No.	D/F	Time	% R	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn
ICV	1	1041			X	X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X	
ICV2	1	1048		X			X													X			X				
ICB	1	1055		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRDL	1	1101			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1	1108		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	1114		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1120		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1127			X																						
CCB	1	1134		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZZZZZZZZZZZZZZZZ	1	1141																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1148																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1155																									
ZZZZZZZZZZZZZZZZZZZZZ	5	1202																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1208																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1215																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1222																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1236																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1243																									
CCV	1	1311		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1318			X																						
CCB	1	1325		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZZZZZZZZZZZZZZZZ	1	1331																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1338																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1345																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1352																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1359																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1406																									

RESUBMITTED

000460

FORM XIV - IN

ILMO4.1

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Instrument ID Number: ICP5 Method Type: P

Start Date: 11/21/03 End Date: 11/21/03

				Analyte Symbols																						
EPA Sample No.	D/F	Time	% R	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn
ZZZZZZZZZZZZZZZZZZZZZZ	1	1413																								
CRDL	1	1419			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1	1426		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	1432		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1438		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1445			X																						
CCB	1	1451		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZ	1	1458																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1505																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1511																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1518																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1525																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1532																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1538																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1545																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1552																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1559																								
CCV	1	1605		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1612			X																						
CCB	1	1619		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZ	5	1626																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1632																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1639																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1646																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1653																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1700																								
ZZZZZZZZZZZZZZZZZZZZZZ	1	1707																								

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Instrument ID Number: ICP5 Method Type: P

Start Date: 11/21/03 End Date: 11/21/03

				Analyte Symbols																							
EPA Sample No.	D/F	Time	% R	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn
CRDL	1	1721			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1	1728		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	1734		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1739		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1746			X																						
CCB	1	1753		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZ	1	1800																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	1807																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	1814																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	1821																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	1828																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	1834																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	1841																									
MB130852	1	1848		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW511008	1	1855		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW511008 DUP	1	1901		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1908		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1915			X																						
CCB	1	1922		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSWFB1008	1	1929		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW521008	1	1936		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW531008	1	1943		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW511008SD	5	1950		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW511008PDS	1	1957		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW511008 MS	1	2004		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCS130853	1	2011		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRDL	1	2024			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	

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ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Instrument ID Number: ICP5 Method Type: P

Start Date: 11/21/03 End Date: 11/21/03

				Analyte Symbols																							
EPA Sample No.	D/F	Time	% R	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn
ICSA	1	2031		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	2037		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	2043		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	2049			X																						
CCB	1	2056		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MB130856	1	2103		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW511008 (DISS)	1	2110		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW511008 DUP (DISS)	1	2117		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW511008 (DISS)SD	5	2124		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSWFB1008 (DISS)	1	2131		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW521008 (DISS)	1	2137		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW531008 (DISS)	1	2144		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW511008 (DISS)PDS	1	2151		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSW511008 MS (DISS)	1	2158		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCS130857	1	2205		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRDL	1	2212			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1	2218		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	2224		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	2230		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	2237			X																						
CCB	1	2244		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 203111311

PROJECT MANAGER: Ron Rolker

Date: January 12, 2004

Revised Report Dated: October 6, 2005

Data Validator: Mark Kromis

APPENDIX C
LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-08	SKGW07R1008 (DISS)
203111311-09	SKGW06R1008 (DISS)
203111311-10	SKGW591008 (DISS)
203111311-11	SKGW601008 (DISS)
203111311-12	SKGW62A1008 (DISS)
203111311-13	SKGW641008 (DISS)
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-18	SKGW581008 (DISS)
203111311-19	SKGW58FD1008 (DISS)
203111311-20	SKGWFB1008 (DISS)
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-26	SKGW611008 DUP
203111311-27	SKGW631008
203111311-28	SKGW241008
203111311-30	SKGW261008 (DISS)
203111311-31	SKGW301008 (DISS)
203111311-32	SKGW611008 (DISS)
203111311-33	SKGW611008 MS (DISS)
203111311-34	SKGW611008 DUP (DISS)
203111311-35	SKGW631008 (DISS)
203111311-36	SKGW241008 (DISS)

INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U — The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J — The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ — The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R — The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Calibration
   A. Initial Calibration (IC)

B. Continuing Calibration (CC)

3. Blanks

4. Inductively Coupled Plasma (ICP) Interference Check Sample

5. Laboratory Control Sample (LCS)

6. Duplicate Analysis

7. Spike Sample Analysis

8. ICP Serial Dilution

9. System Performance

10. Documentation

11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. DUPLICATE ANALYSIS

The RPD between the sample and duplicate were within the acceptance criteria for all target compounds except the Aluminum results associated with the total metals analysis. As per the National Functional Guidelines, if the RPD criteria is not met then qualify the associated results greater than the IDL with "J".

7. SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSW611008 and SKSW611008 (Dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total fraction with the exception of Selenium (52%). The MS percent recoveries were within the acceptance criteria (75%-125%) in the dissolved fraction with the exception of Selenium (0%) and Thallium (74%). As per the National Functional Guidelines: if spike recovery results is greater than 30% but less than the lower acceptance limit then qualify the detected results for that analyte with "J" and non-detected results with "UJ". If the percent recovery is less than 10% then qualify detected results for that analyte with "J" and non-detected results with "R".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The percent differences were within the acceptance criteria for all target analytes in the total and dissolved fractions.

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

The Aluminum results for total metals associated with the Duplicate Analysis were not qualified by GCAL. The data validator manually made the correction on the Form VI and Form I's.

GCAL qualified the total metal results for Aluminum, Nickel and Zinc with an "E" qualifier on the Form 1's and Form IX to indicate that the %Difference (%D) between the original results and its serial dilution result exceeded the control limit. The %Differences were actually within the control limit therefore the data validator crossed out the (E) with a single line and dated and initialed the bottom of the report.

11. OVERALL ASSESSMENT

Barium, Copper, and Iron were detected in the Field Blank (Total) at a concentration of 0.7 B, 1.6 B and 30.8 B ppb respectively. Barium, Copper, and Nickel were detected in the Field Blank (Dissolved) at a concentration of 0.3 B, 1.5 B, and 0.7 B ppb respectively. It should be noted that the laboratory supplied the water used for the Field Blank. The results that are greater than the IDL but less than the CRDL are flagged with a ("B") qualifier by the laboratory.

The percent recoveries for Zinc in the Contract Required Detection Limit (CRDL) standards were 69.8%, 69.7%, 70.1%, and 70.9%. The detected Zinc results were qualified with a "J" and the non-detected Lead results were qualified with "UJ".

There was no Selenium detected in the samples analyzed for total Selenium therefore the dissolved Selenium results that were flagged with and "R" can still be used for informational purposes.

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-07	SKGWTB1008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW611008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   - A. IC
   - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV2. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 11/26/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes with the exception of 4-Chloroaniline. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of Naphthalene (30.1%), 2,4-Dinitrophenol (34.8%), Diethylphthalate (35.1%), Di-n-butylphthalate (47.4%), Di-n-octylphthalate (37.3%), and Caprolactam (35.8%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 8.4%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for Naphthalene and Caprolactam and the %RSD were recalculated. The recalculated %RSD was 28.1% and 9.0%, which are within the acceptance criteria of less than 30%. Naphthalene and Caprolactam results greater than 160 ppb were qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

Two CCs dated 11/26/03 and 12/1/03 were analyzed in support of the semivolatile sample analyses reported in the data submissions.

The RRF's for the CC dated 11/26/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 11/26/03 were within the acceptance criteria with the exception the %D for 2,4-Dintrophenol, Di-n-butylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

The RRF's for the CC dated 12/1/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 12/1/03 were within the acceptance criteria with the exception the %D for Naphthalene, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Di-n-butylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

4. BLANKS

One laboratory semivolatile method blank and one field blank were analyzed with this SDG. The results are summarized below.

Method Blank (MB 130795)

Di-n-butyl phthalate (0.859 ppb) was detected in the method blank extracted on 11/17/03. The results for Di-n-butyl phthalate less than 8.59 ppb were qualified with "U" for samples extracted with method blank 130795.

Bis (2-Ethylhexyl) phthalate (0.414 J ppb) was also detected in the method blank extracted on 11/17/03. The results for bis (2-Ethylhexyl) phthalate less than 4.14 ppb were qualified with "U" for samples extracted with method blank 130795.

Field Blank (SKGW00FB10065)

The presence of Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate detected in the field blank was mitigated because Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate were detected in the associated method blank.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits with the exception of Terphenyl-d14 (25%) associated with sample SKGW58FD1008. As per the National Functional Guidelines, no action is taken when one surrogate is greater than 10% and less than the acceptance limit.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol and Pentachlorophenol in the MS and 4-Nitrophenol in the MSD. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses.

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction/analysis of the groundwater samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate were mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-07	SKGWTB1008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-17	SKGWTB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW611008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008
203111311-29	SKGWTB1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit.

However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   A. IC
   B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Laboratory Control Sample
8. Internal Standards Performance
9. Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. System Performance

12. Documentation

13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. Two bromofluorobenzene (BFB) tunes were run. The BFB tunes were acceptable.

3. CALIBRATION

A. Initial Calibration

Two ICs dated 11/17/03 and 11/18/03 were analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes.

The RRF's and the average RRF for the IC dated 11/17/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The RRF's and the average RRF for the IC dated 11/18/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

B. Continuing Calibration

Two CC's dated 11/17/03 and 11/18/03 were analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. The Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

Two laboratory volatile method blanks, a storage blank, three Trip Blanks, and a Field Blank were analyzed with this SDG. The results are summarized below.

Method Blanks

1117V2BLK01 (11/17/03)

Methylene chloride was detected at a concentration of 0.14 ppb in the method blank analyzed on 11/17/03.

1118V2BLK01 (11/18/03)

There were no target analytes detected in the method blank analyzed on 11/18/03.

Storage Blank (VHBLK01)

There were no target analytes detected in the storage blank.

Trip Blank (SKGWTB1008)

The Methylene chloride detected in the Trip Blank dated 11/12/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Trip Blank at a concentration of 335 ppb.

Trip Blank (SKGWTB1008)

Sulfur dioxide was detected at a concentration of 311 ppb in the Trip Blank dated 11/13/03.

Trip Blank (SKGWTB1008)

There were no target analytes detected in the Trip Blank dated 11/14/03.

Field Blank (SKGWFB1008)

Ethylbenzene (0.075 ppb), Methylene chloride (0.72 ppb), Toluene (0.88 ppb), and Xylenes (0.43 ppb) were detected in the Field Blank collected on 11/13/03. The Methylene chloride detected in the Field Blank collected on 11/13/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Field Blank at a concentration of 5.1 ppb.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was submitted for MS/MSD analysis. The percent recoveries and RDP between the MS/MSD were within the acceptance limits. A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

Two LCS were analyzed in conjunction with this SDG. Recoveries were within the control limits for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. DOCUMENTATION

The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers. It should be noted that the field blank contained detectable quantities of petroleum related analytes although the constituents were not detected in any of the associated surface water samples, therefore no action was taken.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 203111311 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW611008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3. IC
4. Calibration Verification
5. Blanks
6. Surrogate Spikes
7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
8. Pesticide Cleanup Checks
9. Target Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 130813

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 11/17/03.

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of gamma-BHC. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. *National Functional Guidelines for Inorganic Data Review.*

US EPA, 1999. *National Functional Guidelines for Organic Data Review.*

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

NELAP CERTIFICATE NUMBER 01955

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/03/2003

GCAL Report 203111311

ADDENDUM

Deliver To	Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300
Attn	Pat Higgins

Customer Earth Tech

Project Skinner Landfill

CASE NARRATIVE

Client: Earth Tech **Report:** 203111311

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

SEMI-VOLATILES MASS SPECTROMETRY

Sample 20311131115 (SKGW58FD1008) had one surrogate outside of control limits in the base-neutral fraction.

In the semi-volatile analysis, 4-Nitrophenol was recovered above QC limits in the MS/MSD. Pentachlorophenol was above the QC limit in the MSD.

Samples 20311131115 (SKGW58FD1008) and 20311131128 (SKGW241008) have elevated detection limits due to insufficient sample volume.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the analysis of the MS/MSD, the spike recovery for gamma-BHC was below QC limits. This is attributed to matrix interference.

In the analysis of RESC01 (resolution check), Methyoxychlor and Endosulfan Sulfate were not resolved on the confirmation column; however, all compounds were resolved on the initial column.

METALS

In the ILM04.1-CLP Metals analysis for prep batch 265574, the MS recovery was outside the control limits for Selenium. The LCS recovery was within control limits. This indicates the analysis is control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0%.

In the ILM04.1-CLP Metals analysis for prep batch 265576, the MS recovery was outside the control limits for Selenium and Thallium. The LCS recovery was within control limits. This indicates the analysis is control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0% for Selenium and 45% for Thallium.

The MS recovery is not applicable for Iron for prep batch 265574 because the sample concentration is greater than four times the spike concentration.

RESUBMITTED

In the ILM04.1-CLP Metals, Aluminum, Nickel and Zinc are flagged as estimated for samples associated with prep batch 265574 due to the fact that the percent difference between the original sample result and the serial dilution result is greater than 10. A chemical or physical interference is suspected.

MISCELLANEOUS

Samples 2031131104 (SKGW601008), 20311131105 (SKGW62A1008), 20311131112 (SKGW62A1008 (DISS)), 20311131121 (SKGW261008), 20311131122 (SKGW301008), 20311131126 (SKGW611108 DUP), and 20311131134 (SKGW611008 DUP (DISS)) had to be preserved at the laboratory with Nitric acid.

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW07R1008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131101

Level: (low / med) Date Received: 11/13/03

% Solics:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	3130		E *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	5.3	B		P	
7440-39-3	Barium	204			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	246000			P	
7440-47-3	Chromium	4.9	B		P	
7440-48-4	Cobalt	4.3	B		P	
7440-50-8	Copper	10.0	B		P	
7439-89-6	Iron	9890			P	
7439-92-1	Lead	5.2			P	
7439-95-4	Magnesium	41600			P	
7439-96-5	Manganese	969			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	10.5	B	E	P	
7440-09-7	Potassium	3780	B		P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	41200			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	6.5	B		P	
7440-66-6	Zinc	22.7		E	P	J
57-12-5	Cyanide	3.0	U		AS	

10/7/05
MSK

Color Before: LT.BROWN Clarity Before: CLEAR Texture:

Color After: LT.BROWN Clarity After: CLEAR Artifacts:

Comments:

000642

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW06R1008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131102

Level: (low / med) Date Received: 11/13/03

% Solics:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	17000		E *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	20.5			P	
7440-39-3	Barium	568			P	
7440-41-7	Beryllium	1.2	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	378000			P	
7440-47-3	Chromium	27.0			P	
7440-48-4	Cobalt	24.1	B		P	
7440-50-8	Copper	52.1			P	
7439-89-6	Iron	45400			P	
7439-92-1	Lead	46.0			P	
7439-95-4	Magnesium	115000			P	
7439-96-5	Manganese	2940			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	41.2		E	P	
7440-09-7	Potassium	5050			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	22100			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	41.5	B		P	
7440-66-6	Zinc	147		E	P	J
57-12-5	Cyanide	3.0	U		AS	

Color Before: LT.BROWN Clarity Before: CLEAR Texture:

Color After: LT.BROWN Clarity After: CLEAR Artifacts:

Comments:

000643

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW591008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131103

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	3710		F *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	4.3	B		P	
7440-39-3	Barium	213			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	281000			P	
7440-47-3	Chromium	19.1			P	
7440-48-4	Cobalt	7.4	B		P	
7440-50-8	Copper	11.9	B		P	
7439-89-6	Iron	12900			P	
7439-92-1	Lead	10.0			P	
7439-95-4	Magnesium	62400			P	
7439-96-5	Manganese	923			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	20.0	B	F	P	
7440-09-7	Potassium	31900			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	180000			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	5.9	B		P	
7440-66-6	Zinc	36.3		F	P	J
57-12-5	Cyanide	3.0	U		AS	

ioi 7/25 mr

Color Before: LT.YELLOW Clarity Before: CLEAR Texture:

Color After: LT.YELLOW Clarity After: CLEAR Artifacts:

Comments:

000644

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW601008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131104

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	13400		F *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	11.7			P	
7440-39-3	Barium	89.8	B		P	
7440-41-7	Beryllium	0.9	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	158000			P	
7440-47-3	Chromium	33.2			P	
7440-48-4	Cobalt	16.6	B		P	
7440-50-8	Copper	29.3			P	
7439-89-6	Iron	31300			P	
7439-92-1	Lead	28.2			P	
7439-95-4	Magnesium	32500			P	
7439-96-5	Manganese	555			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	31.6	B	F	P	
7440-09-7	Potassium	9290			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	212000			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	23.2	B		P	
7440-66-6	Zinc	135		F	P	J
57-12-5	Cyanide	3.0	U		AS	

12/7/03 MM

Color Before: LT.BROWN Clarity Before: CLEAR Texture:

Color After: LT.BROWN Clarity After: CLEAR Artifacts:

Comments:

000645

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW62A1008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131105

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	24100		E *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	17.7			P	
7440-39-3	Barium	633			P	
7440-41-7	Beryllium	1.5	B		P	
7440-43-9	Cadmium	1.1	B		P	
7440-70-2	Calcium	618000			P	
7440-47-3	Chromium	49.5			P	
7440-48-4	Cobalt	33.5	B		P	
7440-50-8	Copper	72.8			P	
7439-89-6	Iron	60800			P	
7439-92-1	Lead	72.8			P	
7439-95-4	Magnesium	137000			P	
7439-96-5	Manganese	3380			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	64.3		E	P	
7440-09-7	Potassium	15100			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	121000			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	40.5	B		P	
7440-66-6	Zinc	181		E	P	J
57-12-5	Cyanide	3.0	U		AS	

Color Before: DR.BROWN Clarity Before: CLEAR Texture:

Color After: DR.BROWN Clarity After: CLEAR Artifacts:

Comments:

000646

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW641008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131106

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	18700		E *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	10.8			P	
7440-39-3	Barium	95.9	B		P	
7440-41-7	Beryllium	1.0	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	311000			P	
7440-47-3	Chromium	29.4			P	
7440-48-4	Cobalt	23.1	B		P	
7440-50-8	Copper	16.3	B		P	
7439-89-6	Iron	42900			P	
7439-92-1	Lead	20.0			P	
7439-95-4	Magnesium	77300			P	
7439-96-5	Manganese	2390			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	46.0		E	P	
7440-09-7	Potassium	14700			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	68300			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	27.3	B		P	
7440-66-6	Zinc	114		E	P	J
57-12-5	Cyanide	3.0	U		AS	

10/7/05 mm

Color Before: LT.BROWN Clarity Before: CLEAR Texture:

Color After: LT.BROWN Clarity After: CLEAR Artifacts:

Comments:

000647

RESUBMITTED

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW07R1008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131108

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	4.5	B		P	
7440-39-3	Barium	131	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	229000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	1.4	B		P	
7440-50-8	Copper	1.2	U		P	
7439-89-6	Iron	3580			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	33000			P	
7439-96-5	Manganese	849			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	1.6	B		P	
7440-09-7	Potassium	3260	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	42200			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	30.7			P	J

12/7/05
MJE

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
SKGW06R1008 (DISS)

Lab Name: PROJ AAH GCAL Contract:
Lab Code: LA024 Case No.: SAS No.: SDG No.:
Matrix: (soil / water) Water Lab Sample ID: 20311131109
Level: (low / med) Date Received: 11/13/03
% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	294			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	189000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	1.7	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	30500			P	
7439-96-5	Manganese	76.7			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	1.8	B		P	
7440-09-7	Potassium	2400	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	21500			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U		P	UJ

12/19/05 mtm

Color Before: COLORLESS Clarity Before: CLEAR Texture:
Color After: COLORLESS Clarity After: CLEAR Artifacts:
Comments:

000649

RESUBMITTED

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW591008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131110

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	6.5	B		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.7	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	261000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	4.0	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	59500			P	
7439-96-5	Manganese	27.3			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	2.3	B		P	
7440-09-7	Potassium	29800			P	
7782-49-2	Selenium	4.4	U	,N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	186000			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U		P	UJ

10/7/05 mn

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000650

RESUBMITTED

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW601008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131111

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	28.7	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	100000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	4.2	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	20100			P	
7439-96-5	Manganese	2.4	B		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	6970			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	201000			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	B		P	
7440-66-6	Zinc	0.6	U		P	UJ

10/7/05 MSR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000651

RESUBMITTED

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW62A1008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131112

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	126	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	123000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	2.7	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	49200			P	
7439-96-5	Manganese	51.4			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.9	B		P	
7440-09-7	Potassium	10800			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	120000			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.9	B		P	J

11/17/05 MSL

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000652

RESUBMITTED

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW641008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131113

Level: (low / med) Date Received: 11/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	44.6	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	185000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.5	B		P	
7440-50-8	Copper	3.4	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	61800			P	
7439-96-5	Manganese	292			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	5.2	B		P	
7440-09-7	Potassium	12300			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	67600			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	2.6	B		P	J

10/7/05 MR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW581008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131114

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	41600		F *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	32.9			P	
7440-39-3	Barium	822			P	
7440-41-7	Beryllium	2.9	B		P	
7440-43-9	Cadmium	1.8	B		P	
7440-70-2	Calcium	745000			P	
7440-47-3	Chromium	112			P	
7440-48-4	Cobalt	57.2			P	
7440-50-8	Copper	138			P	
7439-89-6	Iron	129000			P	
7439-92-1	Lead	92.7			P	
7439-95-4	Magnesium	148000			P	
7439-96-5	Manganese	4200			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	124		F	P	
7440-09-7	Potassium	11800			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	1.6	B		P	
7440-23-5	Sodium	36900			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	74.0			P	
7440-66-6	Zinc	367		F	P	J
57-12-5	Cyanide	3.0	U		AS	

12/17/03 MS

Color Before: DR.BROWN Clarity Before: CLEAR Texture:

Color After: DR.BROWN Clarity After: CLEAR Artifacts:

Comments:

000654

RESUBMITTED

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW58FD1008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131115

Level: (low / med) Date Received: 11/14/03

% Solics:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	22700		E *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	23.2			P	
7440-39-3	Barium	1000			P	
7440-41-7	Beryllium	1.0	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	852000			P	
7440-47-3	Chromium	60.2			P	
7440-48-4	Cobalt	34.1	B		P	
7440-50-8	Copper	57.9			P	
7439-89-6	Iron	74600			P	
7439-92-1	Lead	39.1			P	
7439-95-4	Magnesium	79500			P	
7439-96-5	Manganese	5360			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	76.9		E	P	
7440-09-7	Potassium	10900			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.5	B		P	
7440-23-5	Sodium	38800			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	40.3	B		P	
7440-66-6	Zinc	172		E	P	J
57-12-5	Cyanide	3.0	U		AS	

jc 12/16/03 MSL

Color Before: DR.BROWN Clarity Before: CLEAR Texture:

Color After: DR.BROWN Clarity After: CLEAR Artifacts:

Comments:

000655

RESUBMITTED

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGWFB1008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131116

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25.8	U	F *	P
7440-36-0	Antimony	3.7	U		P
7440-38-2	Arsenic	2.9	U		P
7440-39-3	Barium	0.7	B		P
7440-41-7	Beryllium	0.1	U		P
7440-43-9	Cadmium	0.2	U		P
7440-70-2	Calcium	118	B		P
7440-47-3	Chromium	0.8	U		P
7440-48-4	Cobalt	0.4	U		P
7440-50-8	Copper	1.6	B		P
7439-89-6	Iron	30.8	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	100	B		P
7439-96-5	Manganese	2.5	B		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.7	U	F	P
7440-09-7	Potassium	42.1	U		P
7782-49-2	Selenium	4.4	U		P
7440-22-4	Silver	0.4	U		P
7440-23-5	Sodium	45.4	U		P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	3.3	B		P
7440-66-6	Zinc	0.6	U	F	P
57-12-5	Cyanide	3.0	U		AS

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Holds mn

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000656

RESUBMITTED

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW581008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131118

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	6.0	B		P	
7440-39-3	Barium	228			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	96400			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	B		P	
7440-50-8	Copper	1.2	U		P	
7439-89-6	Iron	2890			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	32800			P	
7439-96-5	Manganese	354			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	1.3	B		P	
7440-09-7	Potassium	5210			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	34400			P	
7440-28-0	Thallium	2.6	U	N	P	US
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U		P	US

10/27/05 MC

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW58FD1008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131119

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	5.2	B		P	
7440-38-2	Arsenic	8.0	B		P	
7440-39-3	Barium	278			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	91700			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.6	B		P	
7440-50-8	Copper	2.0	B		P	
7439-89-6	Iron	704			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	33100			P	
7439-96-5	Manganese	246			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	3.6	B		P	
7440-09-7	Potassium	5910			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	35700			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U		P	UJ

10/7/05 MR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000658

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGWFB1008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131120

Level: (low / med) Date Received: 11/14/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	0.3	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	41.4	B		P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	1.5	B		P	
7439-89-6	Iron	14.1	U		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	109	B		P	
7439-96-5	Manganese	0.2	U		P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	B		P	
7440-09-7	Potassium	42.1	U		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	45.4	U		P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	3.5	B		P	
7440-66-6	Zinc	0.6	U		P	UJ

10/7/03 MR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000659

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW261008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131121

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	3860		E *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	B		P	
7440-39-3	Barium	352			P	
7440-41-7	Beryllium	0.2	B		P	
7440-43-9	Cadmium	0.5	B		P	
7440-70-2	Calcium	96700			P	
7440-47-3	Chromium	20.6			P	
7440-48-4	Cobalt	5.8	B		P	
7440-50-8	Copper	20.1	B		P	
7439-89-6	Iron	10300			P	
7439-92-1	Lead	8.5			P	
7439-95-4	Magnesium	41900			P	
7439-96-5	Manganese	320			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	16.8	B	E	P	
7440-09-7	Potassium	19100			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	173000			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	2.2	B		P	
7440-66-6	Zinc	32.2		E	P	J
57-12-5	Cyanide	3.0	U		AS	

12/7/05 MSE

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW301008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131122

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	516		E X	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	318			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	B		P	
7440-70-2	Calcium	61000			P	
7440-47-3	Chromium	6.0	B		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	8.4	B		P	
7439-89-6	Iron	2090			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	29200			P	
7439-96-5	Manganese	48.2			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	4.5	B	E	P	
7440-09-7	Potassium	12700			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	145000			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	6.5	B	E	P	J
57-12-5	Cyanide	3.0	U		AS	

10/7/05
mal

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000661

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW611008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131123

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1080		F *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	3.7	B		P	
7440-39-3	Barium	91.3	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	190000			P	
7440-47-3	Chromium	2.1	B		P	
7440-48-4	Cobalt	3.3	B		P	
7440-50-8	Copper	4.2	B		P	
7439-89-6	Iron	8640			P	
7439-92-1	Lead	1.6	B		P	
7439-95-4	Magnesium	37500			P	
7439-96-5	Manganese	922			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	7.6	B	F	P	
7440-09-7	Potassium	9430			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	27700			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	13.8	B	F	P	J
57-12-5	Cyanide	3.0	U		AS	

10/7/05
MJA

Color Before: LT.YELLOW Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW611008 MS

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131124

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	3310		E *	P	J
7440-36-0	Antimony	105			P	
7440-38-2	Arsenic	50.5			P	
7440-39-3	Barium	2060			P	
7440-41-7	Beryllium	52.5			P	
7440-43-9	Cadmium	47.2			P	
7440-70-2	Calcium	197000			P	
7440-47-3	Chromium	203			P	
7440-48-4	Cobalt	482			P	
7440-50-8	Copper	262			P	
7439-89-6	Iron	10300			P	
7439-92-1	Lead	22.0			P	
7439-95-4	Magnesium	39000			P	
7439-96-5	Manganese	1450			P	
7439-97-6	Mercury	5.8			AV	
7440-02-0	Nickel	490		E	P	
7440-09-7	Potassium	10100			P	
7782-49-2	Selenium	5.2			P	UJ
7440-22-4	Silver	50.6			P	
7440-23-5	Sodium	26700			P	
7440-28-0	Thallium	38.4			P	
7440-62-2	Vanadium	505			P	
7440-66-6	Zinc	508		E	P	J
57-12-5	Cyanide	101			AS	

10/7/03 mm

Color Before: LT.YELLOW Clarity Before: CLEAR Texture:

Color After: LT.YELLOW Clarity After: CLEAR Artifacts:

Comments:

000683

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW611008 DUP

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131126

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1310		E *	P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	7.2	B		P	
7440-39-3	Barium	97.4	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	199000			P	
7440-47-3	Chromium	2.3	B		P	
7440-48-4	Cobalt	3.4	B		P	
7440-50-8	Copper	4.6	B		P	
7439-89-6	Iron	9270			P	
7439-92-1	Lead	1.8	B		P	
7439-95-4	Magnesium	39200			P	
7439-96-5	Manganese	963			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	7.6	B	E	P	
7440-09-7	Potassium	10300			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	27000			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	11.9	B	E	P	J
57-12-5	Cyanide	3.0	U		AS	

10/7/05 MAL

Color Before: LT.YELLOW Clarity Before: CLEAR Texture:

Color After: LT.YELLOW Clarity After: CLEAR Artifacts:

Comments:

000664

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW631008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131127

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	10500		E *	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	9.3	B		P	
7440-39-3	Barium	147	B		P	
7440-41-7	Beryllium	0.6	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	465000			P	
7440-47-3	Chromium	13.7			P	
7440-48-4	Cobalt	17.5	B		P	
7440-50-8	Copper	17.4	B		P	
7439-89-6	Iron	25800			P	
7439-92-1	Lead	23.4			P	
7439-95-4	Magnesium	96100			P	
7439-96-5	Manganese	4090			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	31.0	B	E	P	
7440-09-7	Potassium	13500			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	73600			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	17.8	B		P	
7440-66-6	Zinc	66.3		E	P	J
57-12-5	Cyanide	3.0	U		AS	

10/7/05 mm

Color Before: DR.BROWN Clarity Before: CLEAR Texture:

Color After: LT.BROWN Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW241008

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131128

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	13000		E X	P	J
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	8.4	B		P	
7440-39-3	Barium	162	B		P	
7440-41-7	Beryllium	0.7	B		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	544000			P	
7440-47-3	Chromium	19.5			P	
7440-48-4	Cobalt	13.9	B		P	
7440-50-8	Copper	21.6	B		P	
7439-89-6	Iron	30500			P	
7439-92-1	Lead	20.8			P	
7439-95-4	Magnesium	73800			P	
7439-96-5	Manganese	1960			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	28.2	B	E	P	
7440-09-7	Potassium	6610			P	
7782-49-2	Selenium	4.4	U		P	UJ
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	31500			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	26.6	B		P	
7440-66-6	Zinc	63.1		E	P	J
57-12-5	Cyanide	3.0	U		AS	

10/7/05 mk

Color Before: LT.GRAY Clarity Before: CLEAR Texture:

Color After: LT.GRAY Clarity After: CLEAR Artifacts:

Comments:

000666

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW261008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131130

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	4.1	B		P	
7440-38-2	Arsenic	5.9	B		P	
7440-39-3	Barium	344			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	69200			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	1.0	B		P	
7440-50-8	Copper	2.0	B		P	
7439-89-6	Iron	442			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	38500			P	
7439-96-5	Manganese	134			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	1.7	B		P	
7440-09-7	Potassium	19500			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	187000			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U		P	UJ

10/7/05 mv

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000667

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW301008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131131

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	334			P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	60800			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	5.4	B		P	
7439-89-6	Iron	427			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	28900			P	
7439-96-5	Manganese	29.5			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	12600			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	146000			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	0.6	U		P	UJ

10/7/04 MSM

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000668

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW611008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131132

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	7.5	B		P	
7440-39-3	Barium	83.3	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	191000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	2.0	B		P	
7440-50-8	Copper	1.2	U		P	
7439-89-6	Iron	5100			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	35700			P	
7439-96-5	Manganese	866			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	4.0	B		P	
7440-09-7	Potassium	10100			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	28300			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	4.8	B		P	UJ

10/7/05 MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000669

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW611008 MS (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131133

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2120			P	
7440-36-0	Antimony	111			P	
7440-38-2	Arsenic	49.8			P	
7440-39-3	Barium	2090			P	
7440-41-7	Beryllium	53.1			P	
7440-43-9	Cadmium	47.3			P	
7440-70-2	Calcium	195000			P	
7440-47-3	Chromium	206			P	
7440-48-4	Cobalt	491			P	
7440-50-8	Copper	262			P	
7439-89-6	Iron	6000			P	
7439-92-1	Lead	18.8			P	
7439-95-4	Magnesium	36900			P	
7439-96-5	Manganese	1400			P	
7439-97-6	Mercury	5.1			AV	
7440-02-0	Nickel	492			P	
7440-09-7	Potassium	10200			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	51.7			P	
7440-23-5	Sodium	27600			P	
7440-28-0	Thallium	36.8		N	P	J
7440-62-2	Vanadium	521			P	
7440-66-6	Zinc	506			P	J

10/7/05 MSA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW611008 DUP (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131134

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	4.1	B		P	
7440-39-3	Barium	82.5	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	194000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	1.9	B		P	
7440-50-8	Copper	1.2	U		P	
7439-89-6	Iron	5000			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	37200			P	
7439-96-5	Manganese	902			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	3.9	B		P	
7440-09-7	Potassium	10400			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	27600			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	1.5	B		P	J

10/7/05
mc

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000671

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW631008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131135

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	5.4	B		P	
7440-39-3	Barium	68.6	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	278000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	4.1	B		P	
7440-50-8	Copper	1.2	U		P	
7439-89-6	Iron	1150			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	61000			P	
7439-96-5	Manganese	2600			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	6.9	B		P	
7440-09-7	Potassium	11600			P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	72100			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	3.7	B		P	J

10/9/05 mcn

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000672

RESUBMITTED

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW241008 (DISS)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20311131136

Level: (low / med) Date Received: 11/15/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	3.6	B		P	
7440-39-3	Barium	90.4	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	111000			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	B		P	
7440-50-8	Copper	2.1	B		P	
7439-89-6	Iron	1000			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	26400			P	
7439-96-5	Manganese	169			P	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3210	B		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	29300			P	
7440-28-0	Thallium	2.6	U	N	P	UJ
7440-62-2	Vanadium	0.9	B		P	
7440-66-6	Zinc	1.9	B		P	J

11/17/03 MA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000673

RESUBMITTED

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 11/21/03 Time: 1101

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Antimony	120	120	100	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	17.0	85	ug/L	ILM04.1 - CLP Metals	P
Berylliurn	10.0	9.60	96	ug/L	ILM04.1 - CLP Metals	P
Cadmiuin	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	P
Chromiurn	20.0	19.1	95	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	93.3	93	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	47.3	95	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	5.10	86	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	29.4	98	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	P
Seleniurn	10.0	8.60	86	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.7	98	ug/L	ILM04.1 - CLP Metals	P
Thalliurn	20.0	20.6	103	ug/L	ILM04.1 - CLP Metals	P
Vanadiurn	100	97.4	97	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	27.9	70	ug/L	ILM04.1 - CLP Metals	P

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RESUBMITTED

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 11/21/03 Time: 1419

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Antimony	120	124	103	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	18.2	91	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.20	92	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	19.8	99	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	95.0	95	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	47.6	95	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	5.40	90	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	29.4	98	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	76.4	96	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	11.8	118	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.6	98	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	16.6	83	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	102	102	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	27.9	70	ug/L	ILM04.1 - CLP Metals	P

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 11/21/03 Time: 1721

CRDL STANDARD

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Antimony	120	122	101	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	17.1	85	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.40	94	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.10	91	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	19.2	96	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	94.0	94	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	46.3	93	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	5.50	91	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	28.9	96	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	11.0	110	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.5	98	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	16.7	83	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	99.4	99	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	28.0	~~70~~	ug/L	ILM04.1 - CLP Metals	P

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RESUBMITTED

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 11/21/03 Time: 2024

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Antimony	120	122	102	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	18.9	95	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.00	90	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	19.3	97	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	94.1	94	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	47.2	94	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	5.30	89	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	29.3	98	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	13.9	139	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.5	98	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	20.8	104	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	100	100	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	28.3	71	ug/L	ILM04.1 - CLP Metals	P

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 11/21/03 Time: 2212

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Antimony	120	123	103	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	17.2	86	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.60	96	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.10	91	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	19.4	97	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	94.6	95	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	49.1	98	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	5.40	90	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	29.6	99	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	75.9	95	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	16.4	164	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	20.2	101	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	24.0	120	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	101	101	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	28.1	70	ug/L	ILM04.1 - CLP Metals	P

U.S. EPA - CLP

3

BLANKS

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Preparation Blank Matrix: (soil / water) Water

Preparation Blank Concentration Units: (ug/L / mg/kg) ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	-38.4	B	25.8	U	25.8	U	-44.3	B	-29.275	B	P
Antimony	3.7	U	6.7	B	3.7	U	6.2	B	4.454	B	P
Arsenic	2.9	U	2.9	U	-3.1	B	2.9	U	2.900	U	P
Barium	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Beryllium	0.2	B	0.2	B	0.1	U	0.1	U	0.164	B	P
Cadmium	0.2	U	0.2	U	-0.3	B	0.2	U	0.200	U	P
Calcium	7.5	U	7.5	U	7.5	U	7.5	U	7.500	U	P
Chromium	0.8	U	0.8	U	0.8	U	0.8	U	0.800	U	P
Cobalt	0.4	U	0.4	B	0.4	U	0.4	U	0.714	B	P
Copper	4.4	B	2.9	B	1.5	B	2.4	B	1.307	B	P
Iron	22.7	B	31.0	B	14.1	U	14.1	U	25.425	B	P
Lead	1.5	B	1.5	U	1.5	U	1.5	U	1.500	U	P
Magnesium	40.3	B	92.0	B	39.8	B	96.1	B	99.726	B	P
Manganese	0.2	U	0.2	U	-0.5	B	0.2	U	0.295	B	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	AV
Nickel	0.8	B	0.7	B	0.7	U	0.7	U	1.038	B	P
Potassium	42.1	U	42.1	U	42.1	U	42.1	U	42.100	U	P
Selenium	4.4	U	4.4	U	4.4	U	4.4	U	4.400	U	P
Silver	0.4	U	-1	B	0.4	U	-1	B	-0.816	B	P
Sodium	-126.2	B	-159.2	B	-220.2	B	-200.4	B	-118.77	B	P
Thallium	3.5	B	2.6	U	2.6	U	2.6	U	2.600	U	P
Vanadium	0.8	U	0.8	U	4.1	B	3.0	B	0.800	U	P
Zinc	-7.7	B	-8.9	B	-11.9	B	-11.1	B	-5.669	B	P
Cyanide	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	AS

000681

RESUBMITTED

U.S. EPA - CLP

3

BLANKS

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Preparation Blank Matrix: (soil / water) Water

Preparation Blank Concentration Units: (ug/L / mg/kg) ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 4	C	5	C	6	C	Prepa-ration Blank	C	M
Aluminum			-94.3	B	-70.8	B	-73.0	B	-72.080	B	P
Antimony			3.7	U	7.7	B	3.7	U	3.700	U	P
Arsenic			2.9	U	2.9	U	2.9	U	2.900	U	P
Barium			0.3	U	0.3	U	0.3	U	0.300	U	P
Beryllium			0.1	U	0.1	U	0.1	U	0.100	U	P
Cadmium			-0.3	B	0.2	U	0.2	U	-0.2790	B	P
Calcium			13.9	B	7.5	U	7.5	U	28.052	B	P
Chromium			0.8	U	0.8	U	0.8	U	0.800	U	P
Cobalt			0.4	U	0.4	U	0.4	U	0.400	U	P
Copper			1.2	B	4.9	B	2.4	B	1.200	U	P
Iron			14.1	U	14.1	U	14.1	U	14.100	U	P
Lead			1.5	U	1.5	U	1.5	U	1.500	U	P
Magnesium			-70.7	B	36.7	U	-61.5	B	36.700	U	P
Manganese			0.2	U	0.2	U	-0.2	B	0.423	B	P
Mercury			0.1	U	0.1	U			0.100	U	AV
Nickel			0.7	U	0.7	U	0.7	U	0.700	U	P
Potassium			42.1	U	42.1	U	42.1	U	42.100	U	P
Selenium			4.4	U	4.4	U	4.4	U	4.400	U	P
Silver			-0.7	B	0.4	U	-0.4	B	-0.793	B	P
Sodium			-236.5	B	-211.9	B	-249.7	B	-225.250	B	P
Thallium			2.6	U	2.6	U	-4.0	B	2.600	U	P
Vanadium			4.0	B	3.1	B	3.5	B	3.078	B	P
Zinc			-11.9	B	-10.5	B	-12.1	B	-5.780	B	P
Cyanide			3.0	U							AS

000682

RESUBMITTED

U.S. EPA - CLP

3

BLANKS

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Preparation Blank Matrix: (soil / water) _____

Preparation Blank Concentration Units: (ug/L / mg/kg) _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 7	C	8	C	9	C	Prepa-ration Blank	C	M
Aluminum			-66.0	B	-66.1	B					P
Antimony			9.7	B	11.4	B					P
Arsenic			-3.1	B	2.9	U					P
Barium			0.3	U	0.3	U					P
Beryllium			0.1	B	0.1	B					P
Cadmium			0.2	U	0.2	U					P
Calcium			7.5	U	10.1	B					P
Chromium			0.8	U	0.8	U					P
Cobalt			0.6	B	0.4	B					P
Copper			6.6	B	5.9	B					P
Iron			14.1	U	14.1	U					P
Lead			1.5	U	1.5	U					P
Magnesium			36.7	U	44.7	B					P
Manganese			0.2	U	0.2	U					P
Mercury											AV
Nickel			0.7	U	0.7	U					P
Potassium			42.1	U	42.1	U					P
Selenium			4.4	U	4.4	U					P
Silver			-0.8	B	-0.6	B					P
Sodium			-320.5	B	-331.0	B					P
Thallium			2.6	U	2.6	U					P
Vanadium			2.9	B	3.0	B					P
Zinc			-9.6	B	-9.4	B					P
Cyanide											AS

000683

RESUBMITTED

MS/MSD RECOVERY

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No: SKGW611008

SAMPLE NO. : 20311131124

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	*#*	*QC. LIMITS*
Aluminum	ug/L	2000	1080	3310	111		75 - 125
Antimony	ug/L	100	3.7	105	105		75 - 125
Arsenic	ug/L	40	3.7	50.5	117		75 - 125
Barium	ug/L	2000	91.3	2060	98		75 - 125
Beryllium	ug/L	50	.1	52.5	105		75 - 125
Cadmium	ug/L	50	.2	47.2	94		75 - 125
Chromium	ug/L	200	2.1	203	101		75 - 125
Cobalt	ug/L	500	3.3	482	96		75 - 125
Copper	ug/L	250	4.2	262	103		75 - 125
Iron	ug/L	1000	8640	10300	166		-
Lead	ug/L	20	1.6	22	102		75 - 125
Manganese	ug/L	500	922	1450	106		75 - 125
Mercury	ug/L	5	.1	5.8	115		75 - 125
Nickel	ug/L	500	7.6	490	96		75 - 125
Selenium	ug/L	10	4.4	5.2	52	N	75 - 125
Silver	ug/L	50	.4	50.6	101		75 - 125
Thallium	ug/L	50	2.6	38.4	77		75 - 125
Vanadium	ug/L	500	.8	505	101		75 - 125
Zinc	ug/L	500	13.8	508	99		75 - 125
Cyanide	ug/L	100	3	101	101		75 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 0 outside limits

Spike Recovery: 1 out of 20 outside limits

000687

RESUBMITTED

MS/MSD RECOVERY

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No: SKGW611008 (DISS)

SAMPLE NO. : 20311131133

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	*#*	*QC. LIMITS*
Aluminum	ug/L	2000	25.8	2120	106		75 - 125
Antimony	ug/L	100	3.7	111	111		75 - 125
Arsenic	ug/L	40	7.5	49.8	106		75 - 125
Barium	ug/L	2000	83.3	2090	100		75 - 125
Beryllium	ug/L	50	.1	53.1	106		75 - 125
Cadmium	ug/L	50	.2	47.3	95		75 - 125
Chromium	ug/L	200	.8	206	103		75 - 125
Cobalt	ug/L	500	2	491	98		75 - 125
Copper	ug/L	250	1.2	262	105		75 - 125
Iron	ug/L	1000	5100	6000	89		-
Lead	ug/L	20	1.5	18.8	94		75 - 125
Manganese	ug/L	500	866	1400	107		75 - 125
Mercury	ug/L	5	.1	5.1	101		75 - 125
Nickel	ug/L	500	4	492	98		75 - 125
Selenium	ug/L	10	4.4	4.4	0	N	75 - 125
Silver	ug/L	50	.4	51.7	103		75 - 125
Thallium	ug/L	50	2.6	36.8	74	N	75 - 125
Vanadium	ug/L	500	.8	521	104		75 - 125
Zinc	ug/L	500	4.8	506	100		75 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 0 outside limits

Spike Recovery: 2 out of 19 outside limits

000688

RESUBMITTED

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

SKGW611008PDS

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No.: Contract:

Matrix: (soil / water) Water SAS No.: SDG No.:

% Solids for Sample: Level: (low / med)

Concentration Units (ug/L or mg/kg dry weight) : ug/L

Analyte	*Control Limit %R*		*Spiked Sample Result (SSR)*	*C*	*Sample Result (SR)*	*C*	*Spike Added (SA)*	*% R*	*Q*	*M*
Aluminum			2800		25.8	U		0		P
Antimony			120		3.7	U	120	100		P
Arsenic			27.6		3.7	B	20	119		P
Barium			97.2	B	.3	U		0		P
Beryllium			9.8		.1	U	10	98		P
Cadmium			8.8		.2	U	10	88		P
Calcium			191000		7.5	U		0		P
Chromium			21.5		2.1	B	20	97		P
Cobalt			92.5		3.3	B	100	89		P
Copper			51.7		4.2	B	50	95		P
Iron			9170		14.1	U		0		P
Lead			7		1.6	B	6	90		P
Magnesium			37700		36.7	U		0		P
Manganese			957		922		30	118		P
Nickel			78		7.6	B	80	88		P
Potassium			10200		42.1	U		0		P
Selenium			4.4	U	4.4	U	10	0		P
Silver			17.9		.4	U	20	89		P
Sodium			27800		45.4	U		0		P
Thallium			14.1		2.6	U	20	70		P
Vanadium			94		.8	U	100	94		P
Zinc			49		13.8	B	40	88		P

Comments:

000689

RESUBMITTED

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

SKGW611008 (DISS)PDS

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No.: _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

% Solids for Sample: Level: (low / med) _____

Concentration Units (ug/L or mg/kg dry weight) : ug/L

Analyte	Control Limit %R		Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
Aluminum			25.8	U	25.8	U		0		P
Antimony			121		3.7	U	120	101		P
Arsenic			26.2		7.5	B	20	93		P
Barium			84.2	B	.3	U		0		P
Beryllium			9.6		.1	U	10	96		P
Cadmium			8.1		.2	U	10	81		P
Calcium			192000		7.5	U		0		P
Chromium			19.1		.8	U	20	96		P
Cobalt			91.8		2	B	100	90		P
Copper			48.8		1.2	U	50	98		P
Iron			5130		14.1	U		0		P
Lead			5.2		1.5	U	6	87		P
Magnesium			35900		36.7	U		0		P
Manganese			906		866		30	135		P
Nickel			73.9		4	B	80	87		P
Potassium			10100		42.1	U		0		P
Selenium			4.4	U	4.4	U	10	0		P
Silver			18.3		.4	U	20	92		P
Sodium			28300		45.4	U		0		P
Thallium			9	B	2.6	U	20	45		P
Vanadium			94.6		.8	U	100	95		P
Zinc			42.1		4.8	B	40	93		P

Comments:

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO
SKGW611008 DUP

Lab Name: PROJ AAH GCAL

Lab Code LA024 Case No.: _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

Level: (low / med) _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration Units (ug/L or mg/kg dry weight) ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	0 - 20	1080		1310		19	*	P
Antimony	-	3.7	U	3.7	U	0		P
Arsenic	-	3.7	B	7.2	B	64		P
Barium	-	91.3	B	97.4	B	6		P
Beryllium	-	.1	U	.1	U	0		P
Cadmium	-	.2	U	.2	U	0		P
Calcium	0 - 20	190000		199000		5		P
Chromium	-	2.1	B	2.3	B	9		P
Cobalt	-	3.3	B	3.4	B	3		P
Copper	-	4.2	B	4.6	B	9		P
Iron	0 - 20	8640		9270		7		P
Lead	-	1.6	B	1.8	B	12		P
Magnesium	0 - 20	37500		39200		4		P
Manganese	0 - 20	922		963		4		P
Mercury	-	.1	U	.1	U	0		AV
Nickel	-	7.6	B	7.6	B	0		P
Potassium	0 - 5000	9430		10300		870		P
Selenium	-	4.4	U	4.4	U	0		P
Silver	-	.4	U	.4	U	0		P
Sodium	0 - 20	27700		27000		3		P
Thallium	-	2.6	U	2.6	U	0		P
Vanadium	-	.8	U	.8	U	0		P
Zinc	-	13.8	B	11.9	B	15		P
Cyanide	-	3	U	3	U	0		AS

10/7/05
MSL

000691
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6

DUPLICATES

EPA SAMPLE NO

SKGW611008 DUP (DISS)

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No.: _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

Level: (low / med) _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration Units (ug/L or mg/kg dry weight) ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	-	25.8	U	25.8	U	0		P
Antimony	-	3.7	U	3.7	U	0		P
Arsenic	-	7.5	B	4.1	B	59 32		P
Barium	-	83.3	B	82.5	B	1		P
Beryllium	-	.1	U	.1	U	0		P
Cadmium	-	.2	U	.2	U	0		P
Calcium	0 - 20	191000		194000		2		P
Chromium	-	.8	U	.8	U	0		P
Cobalt	-	2	B	1.9	B	5		P
Copper	-	1.2	U	1.2	U	0		P
Iron	0 - 20	5100		5000		2		P
Lead	-	1.5	U	1.5	U	0		P
Magnesium	0 - 20	35700		37200		4		P
Manganese	0 - 20	866		902		4		P
Mercury	-	.1	U	.1	U	0		AV
Nickel	-	4	B	3.9	B	3		P
Potassium	0 - 5000	10100		10400		300		P
Selenium	-	4.4	U	4.4	U	0		P
Silver	-	.4	U	.4	U	0		P
Sodium	0 - 20	28300		27600		3		P
Thallium	-	2.6	U	2.6	U	0		P
Vanadium	-	.8	U	.8	U	0		P
Zinc	-	4.8	B	1.5	B	105 303		P

10/7/05 msw

000692

RESUBMITTED

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Solid LCS Source:

Aqueous LCS Source: 106-40-1 ~310006 HIGH PURITY~323

Analyte	Aqueous (ug/L) True	Found	% R	Solid (mg/kg) True	Found	C	% R
Aluminium	2000	2000	100				
Antimony	500	525	105				
Arsenic	2000	2070	103				
Barium	2000	1970	98				
Beryllium	50.0	52.6	105				
Cadmium	50.0	48.9	98				
Calcium	10000	9920	99				
Chromium	200	201	100				
Cobalt	500	490	98				
Copper	250	255	102				
Iron	1000	1040	104				
Lead	500	498	100				
Magnesium	10000	10200	102				
Manganese	500	503	101				
Nickel	500	496	99				
Potassium	10000	9940	99				
Selenium	2000	2060	103				
Silver	50.0	50.1	100				
Sodium	10000	9650	96				
Thallium	2000	2000	100				
Vanadium	500	503	101				
Zinc	500	478	96				

000633

RESUBMITTED

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Solid LCS Source: _____

Aqueous LCS Source: 106-40-1 ~310006 HIGH PURITY~323

Analyte	Aqueous (ug/L)			Solid (mg/kg)			
	True	Found	% R	True	Found	C	% R
Aluminium	2000	2010	100				
Antimony	500	521	104				
Arsenic	2000	2040	102				
Barium	2000	1990	100				
Beryllium	50.0	52.6	105				
Cadmium	50.0	48.6	97				
Calcium	10000	10000	100				
Chromium	200	202	101				
Cobalt	500	490	98				
Copper	250	255	102				
Iron	1000	1030	103				
Lead	500	497	99				
Magnesium	10000	10100	101				
Manganese	500	510	102				
Nickel	500	494	99				
Potassium	10000	9960	100				
Selenium	2000	2040	102				
Silver	50.0	50.5	101				
Sodium	10000	9860	99				
Thallium	2000	2010	100				
Vanadium	500	515	103				
Zinc	500	485	97				

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

SKGW611008SD

Lab Name: PROJ AAH GCAL

Lab Code LA024 Case No. _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

Level: (low / med) _____

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	1080		1320		22.2	E	P
Antimony	37.0	U	18.5	U			P
Arsenic	3.7	B	14.5	U	292		P
Barium	91.3	B	97.5	B	6.8		P
Beryllium	1.0	U	0.5	U			P
Cadmium	2.0	U	1.0	U			P
Calcium	190000		198000		4.2		P
Chromium	2.1	B	4.0	U	90.5		P
Cobalt	3.3	B	3.1	B	6.1		P
Copper	4.2	B	6.0	U	42.9		P
Iron	8640		9220		6.7		P
Lead	1.6	B	7.5	U	369		P
Magnesium	37500		40800		8.8		P
Manganese	922		972		5.4		P
Nickel	7.6	B	6.2	B	18.4	E	P
Potassium	9430		9470	B	.4		P
Selenium	44.0	U	22.0	U			P
Silver	4.0	U	2.0	U			P
Sodium	27700		26600		4		P
Thallium	26.0	U	13.0	U			P
Vanadium	8.0	U	4.0	U			P
Zinc	13.8	B	3.0	U	78.3	E	P

000697

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9

ICP SERIAL DILUTIONS

EPA SAMPLE NO.

SKGW611008 (DISS)SD

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No. _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

Level: (low / med) _____

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	258	U	129	U			P
Antimony	37.0	U	18.5	U			P
Arsenic	7.5	B	14.5	U	93.3		P
Barium	83.3	B	80.8	B	3		P
Beryllium	1.0	U	0.5	U			P
Cadmium	2.0	U	1.0	U			P
Calcium	191000		192000		.5		P
Chromium	8.0	U	4.0	U			P
Cobalt	2.0	B	2.3	B	15		P
Copper	12.0	U	6.0	U			P
Iron	5100		5090		.2		P
Lead	15.0	U	7.5	U			P
Magnesium	35700		36400		2		P
Manganese	866		864		.2		P
Nickel	4.0	B	4.2	B	5		P
Potassium	10100		9760	B	3.4		P
Selenium	44.0	U	22.0	U			P
Silver	4.0	U	2.0	U			P
Sodium	28300		26200		7.4		P
Thallium	26.0	U	13.0	U			P
Vanadium	8.0	U	11.3	B			P
Zinc	4.8	B	3.0	U	37.5		P

000698

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10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: ICP5 Study Date: 04/30/03

Analyte	Wavelength (nm)	Background	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.210		200	25.8	P
Antimony	206.830		60	3.7	P
Arsenic	193.700		10	2.9	P
Barium	233.520		200	.3	P
Beryllium	313.100		5	.1	P
Cadmium	214.430		5	.2	P
Calcium	315.880		5000	7.5	P
Chromium	267.710		10	.8	P
Cobalt	228.610		50	.4	P
Copper	324.750		25	1.2	P
Iron	259.940		100	14.1	P
Lead	220.350		3	1.5	P
Magnesium	279.080		5000	36.7	P
Manganese	257.610		15	.2	P
Nickel	231.600		40	.7	P
Potassium	766.480		5000	42.1	P
Selenium	196.030		5	4.4	P
Silver	328.060		10	.4	P
Sodium	589.580		5000	45.4	P
Thallium	190.800		10	2.6	P
Vanadium	290.880		50	.8	P
Zinc	213.860		20	.6	P

000699

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ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Instrument ID Number: ICP5 Method Type: P

Start Date: 11/21/03 End Date: 11/21/03

				Analyte Symbols																							
EPA Sample No.	D/F	Time	% R	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn
ICV	1	1041			X	X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X	
ICV2	1	1048		X			X													X			X				
ICB	1	1055		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRDL	1	1101			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1	1108		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	1114		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1120		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1127			X																						
CCB	1	1134		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MB130846	1	1141		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW611008	1	1148		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW611008 DUP	1	1155		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW611008SD	5	1202		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW611008PDS	1	1208		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW611008 MS	1	1215		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCS130847	1	1222		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW261008	1	1236		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW301008	1	1243		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1311		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1318			X																						
CCB	1	1325		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW631008	1	1331		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW241008	1	1338		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW07R1008	1	1345		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW06R1008	1	1352		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW591008	1	1359		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW601008	1	1406		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

RESUBMITTED 000211

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: , SDG No.:

Instrument ID Number: ICP5 Method Type: P

Start Date: 11/21/03 End Date: 11/21/03

				Analyte Symbols																						
EPA Sample No.	**D/F**	**Time**	**% R**	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn
SKGW62A1008	1	1413		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRDL	1	1419			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1	1426		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	1432		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1438		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1445			X																						
CCB	1	1451		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW641008	1	1458		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW581008	1	1505		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW58FD1008	1	1511		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGWFB1008	1	1518		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MB130849	1	1525		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW611008 (DISS)	1	1532		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW611008 DUP (DISS)	1	1538		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW611008 (DISS)PDS	1	1545		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW611008 MS (DISS)	1	1552		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCS130850	1	1559		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1605		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1612			X																						
CCB	1	1619		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW611008 (DISS)SD	5	1626		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW261008 (DISS)	1	1632		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW301008 (DISS)	1	1639		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW631008 (DISS)	1	1646		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW241008 (DISS)	1	1653		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW07R1008 (DISS)	1	1700		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW06R1008 (DISS)	1	1707		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

RESUBMITTED 27-000

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Instrument ID Number: ICP5 Method Type: P

Start Date: 11/21/03 End Date: 11/21/03

				Analyte Symbols																						
EPA Sample No.	**D/F**	**Time**	**% R**	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn
CRDL	1	1721			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1	1728		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	1734		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1739		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1746			X																						
CCB	1	1753		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW591008 (DISS)	1	1800		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW601008 (DISS)	1	1807		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW62A1008 (DISS)	1	1814		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW641008 (DISS)	1	1821		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW581008 (DISS)	1	1828		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGW58FD1008 (DISS)	1	1834		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKGWFB1008 (DISS)	1	1841		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZZZZZZZZZZZZZZZZ	1	1848																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1855																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1901																									
CCV	1	1908		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1915			X																						
CCB	1	1922		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZZZZZZZZZZZZZZZZ	1	1929																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1936																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1943																									
ZZZZZZZZZZZZZZZZZZZZZ	5	1950																									
ZZZZZZZZZZZZZZZZZZZZZ	1	1957																									
ZZZZZZZZZZZZZZZZZZZZZ	1	2004																									
ZZZZZZZZZZZZZZZZZZZZZ	1	2011																									
CRDL	1	2024			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	

FORM XIV - IN ILMO4.1

RESUBMITTED

000213

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Instrument ID Number: ICP5 Method Type: P

Start Date: 11/21/03 End Date: 11/21/03

				Analyte Symbols																						
EPA Sample No.	D/F	Time	% R	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn
ICSA	1	2031		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	2037		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	2043		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	2049			X																						
CCB	1	2056		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZ	1	2103																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	2110																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	2117																									
ZZZZZZZZZZZZZZZZZZZZZZ	5	2124																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	2131																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	2137																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	2144																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	2151																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	2158																									
ZZZZZZZZZZZZZZZZZZZZZZ	1	2205																									
CRDL	1	2212			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1	2218		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	2224		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	2230		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	2237			X																						
CCB	1	2244		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

RESUBMITTED

000214

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

NELAP CERTIFICATE NUMBER 01955

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/30/2003

GCAL Report 203121507

ADDENDUM

Deliver To	Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300
Attn	Pat Higgins

Customer Earth Tech

Project Skinner Landfill

CASE NARRATIVE

Client: Earth Tech **Report:** 203121507

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

The ILM04.1 – CLP analysis is resubmitted as an addendum to include an expanded list of compounds at the request of the client. The Addendum includes an updated case narrative.

VOLATILES MASS SPECTROMETRY

In the OLC02.1 - CLP Volatiles analysis, sample 20312150703 (SKSWD52FB1008) had to be diluted due to compounds that were detected above the linear range of the calibration.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the analysis of RESC01 on column-2, there was no resolution between Methoxychlor and Endosulfan Sulfate. There was no target analysis present in the associated samples. All peaks resolved on the primary column.

METALS

Copper, Iron, and Zinc is flagged as estimated for samples associated with prep batch 266831 due to the fact that the percent difference between the original sample result and the serial dilution result is greater than ten. A chemical or physical interference is suspected.

In the ILM04.1 – CLP analysis the Sample/Duplicate RPD for Cobalt for prep batch 266831 is not applicable because the sample and/or duplicate concentration is less than five times the reporting limit.

In the Mercury analysis for prep batch 266832, the MS recovery was outside the control limits. The LCS recovery was within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

MISCELLANEOUS

Sample 20312150705 (SKSWD521008 (DISSOLVED)) had to be preserved at the laboratory with Nitric Acid.

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSWD521008
03

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20312150701

Level: (low / med) Date Received: 12/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	177	B		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	37.0	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	121000			P	
7440-47-3	Chromium	1.0	B		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	14.8	B		P	
7439-89-6	Iron	155			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	26600			P	
7439-96-5	Manganese	16.5			P	
7439-97-6	Mercury	0.1	U	N	AV	UJ
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3560	B		P	
7782-49-2	Selenium	4.4	U		P	
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	10300			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	32.6			P	J
57-12-5	Cyanide	3.0	U		AS	

12/15/03 AL

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000271

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSWD52DUP1008
03

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20312150702

Level: (low / med) Date Received: 12/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	173	B		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	37.4	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	125000			P	
7440-47-3	Chromium	1.1	B		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	10.3	B		P	
7439-89-6	Iron	211			P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	27900			P	
7439-96-5	Manganese	17.5			P	
7439-97-6	Mercury	0.1	U	N	AV	UJ
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3680	B		P	
7782-49-2	Selenium	4.4	U		P	
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	10600			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	35.7			P	J
57-12-5	Cyanide	3.0	U		AS	

photo mix

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000272

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSWD521008 (DISSOLVE 03)

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20312150705

Level: (low / med) Date Received: 12/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	98.7	B		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.1	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	130000			P	
7440-47-3	Chromium	1.4	B		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	10.4	B		P	
7439-89-6	Iron	59.0	B		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	28500			P	
7439-96-5	Manganese	10.9	B		P	
7439-97-6	Mercury	0.1	U	N	AV	UJ
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3870	B		P	
7782-49-2	Selenium	4.4	U		P	
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	11100			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	2.2	B		P	
7440-66-6	Zinc	91.6			P	J

10/16/03 MSC

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000273

RESUBMITTED

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSWD52DUP1008 (DISS

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix: (soil / water) Water Lab Sample ID: 20312150706

Level: (low / med) Date Received: 12/13/03

% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	69.7	B		P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	37.4	B		P	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	128000			P	
7440-47-3	Chromium	0.9	B		P	
7440-48-4	Cobalt	0.4	U		P	
7440-50-8	Copper	7.8	B		P	
7439-89-6	Iron	46.1	B		P	
7439-92-1	Lead	1.5	U		P	
7439-95-4	Magnesium	27800			P	
7439-96-5	Manganese	10.1	B		P	
7439-97-6	Mercury	0.1	U	N	AV	UJ
7440-02-0	Nickel	0.7	U		P	
7440-09-7	Potassium	3840	B		P	
7782-49-2	Selenium	4.4	U		P	
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	11000			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		P	
7440-66-6	Zinc	33.9			P	J

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000274

RESUBMITTED

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203121507

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 12/19/03 Time: 1013

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Antimony	120	125	104	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	20.2	101	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.70	97	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.60	96	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	20.1	101	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	98.3	98	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	46.6	93	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	7.00	117	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	30.4	101	ug/L	ILM04.1 - CLP Metals	P
Nicke	80.0	79.9	100	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	12.8	128	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.5	97	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	21.2	106	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	101	101	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	31.3	78	ug/L	ILM04.1 - CLP Metals	P

000276

RESUBMITTED

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203121507

Calibration Source: 106-41-2 CPI Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 12/19/03 Time: 1201

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Antimony	120	122	102	ug/L	ILM04.1 - CLP Metals	P
Arsenic	20.0	18.6	93	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	P
Cadmium	10.0	9.40	94	ug/L	ILM04.1 - CLP Metals	P
Chromium	20.0	19.8	99	ug/L	ILM04.1 - CLP Metals	P
Cobalt	100	97.4	97	ug/L	ILM04.1 - CLP Metals	P
Copper	50.0	46.4	93	ug/L	ILM04.1 - CLP Metals	P
Lead	6.00	6.90	114	ug/L	ILM04.1 - CLP Metals	P
Manganese	30.0	30.3	101	ug/L	ILM04.1 - CLP Metals	P
Nickel	80.0	79.6	99	ug/L	ILM04.1 - CLP Metals	P
Selenium	10.0	8.40	84	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.8	99	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	21.9	110	ug/L	ILM04.1 - CLP Metals	P
Vanadium	100	99.9	100	ug/L	ILM04.1 - CLP Metals	P
Zinc	40.0	29.4	73	ug/L	ILM04.1 - CLP Metals	P

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 203121507

Calibration Source: 106-44-8 EXAXOL Instrument ID: FIMS1 ICAL ID: 1

Date Analyzed: 12/30/03 Time: 1255

CRDL STANDARD

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.200	0.200	77	ug/L	ILM04.1 CLP HG	AV

FORM II B - IN

000276B

ADDITION

U.S. EPA - CLP

3

BLANKS

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Preparation Blank Matrix: (soil / water) Water

Preparation Blank Concentration Units: (ug/L / mg/kg) ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminium	44.6	B	25.8	U	25.8	U			25.800	U	P
Antimony	3.7	U	4.1	B	3.9	B			3.700	U	P
Arsenic	2.9	U	2.9	U	2.9	U			2.900	U	P
Barium	0.3	U	0.3	U	0.3	U			0.300	U	P
Beryllium	0.1	U	0.1	U	0.1	U			0.100	U	P
Cadmium	0.4	B	1.7	B	1.8	B			0.639	B	P
Calcium	7.5	U	12.9	B	16.9	B			17.791	B	P
Chromium	0.8	U	0.8	U	0.8	U			0.800	U	P
Cobalt	0.4	U	0.4	U	0.6	B			0.400	U	P
Copper	7.3	B	10.6	B	6.3	B			15.864	B	P
Iron	14.1	U	14.1	U	14.1	U			14.100	U	P
Lead	1.5	U	1.5	U	1.5	U			1.500	U	P
Magnesium	36.7	U	46.7	B	43.1	B			-61.778	B	P
Manganese	-0.3	B	-0.3	B	-0.5	B			0.321	B	P
Mercury	0.1	U	0.1	U	0.1	U			0.100	U	AV
Nickel	0.7	U	0.7	U	0.7	U			0.700	U	P
Potassium	42.1	U	42.1	U	42.1	U			42.100	U	P
Selenium	4.4	U	4.4	U	4.4	U			4.400	U	P
Silver	0.4	U	-0.7	B	-0.9	B			-1.318	B	P
Sodium	-65.8	B	-97.5	B	-167.3	B			-48.226	B	P
Thallium	2.6	U	2.6	U	2.9	B			2.600	U	P
Vanadium	2.1	B	2.1	B	1.7	B			0.800	U	P
Zinc	-0.9	B	0.7	B	-3.1	B			14.391	B	P
Cyanide	3.0	U	3.0	U	3.0	U			3.000	U	AS

000277

RESUBMITTED

MS/MSD RECOVERY

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Matrix Spike - EPA Sample No: SKSWD521008

SAMPLE NO. : 136171

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	*#*	*QC. LIMITS*
Aluminum	ug/L	2000	177	2480	115		75 - 125
Antimony	ug/L	100	3.7	107	107		75 - 125
Arsenic	ug/L	40	2.9	43.6	109		75 - 125
Barium	ug/L	2000	37	2120	104		75 - 125
Beryllium	ug/L	50	.1	55.1	110		75 - 125
Cadmium	ug/L	50	.2	49.4	99		75 - 125
Chromium	ug/L	200	1	211	105		75 - 125
Cobalt	ug/L	500	.4	495	99		75 - 125
Copper	ug/L	250	14.8	274	104		75 - 125
Iron	ug/L	1000	155	1330	117		75 - 125
Lead	ug/L	20	1.5	21.1	105		75 - 125
Manganese	ug/L	500	16.5	556	108		75 - 125
Nickel	ug/L	500	.7	501	100		75 - 125
Selenium	ug/L	10	4.4	8.6	86		75 - 125
Silver	ug/L	50	.4	53.5	107		75 - 125
Thallium	ug/L	50	2.6	48.3	97		75 - 125
Vanadium	ug/L	500	.8	538	108		75 - 125
Zinc	ug/L	500	32.6	517	97		75 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 0 outside limits

Spike Recovery: 0 out of 18 outside limits

000279

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U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

SKSWD521008PDS

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No.: _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

% Solids for Sample: Level: (low / med) _____

Concentration Units (ug/L or mg/kg dry weight) : ug/L

Analyte	Control Limit %R		Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
Aluminum			234		25.8	U		0		P
Antimony			123		3.7	U	120	103		P
Arsenic			14		2.9	U	20	70		P
Barium			36.4	B	.3	U		0		P
Beryllium			10.1		.1	U	10	101		P
Cadmium			8.9		.2	U	10	89		P
Calcium			121000		7.5	U		0		P
Chromium			20.5		1	B	20	97		P
Cobalt			92.8		.4	U	100	93		P
Copper			59.2		14.8	B	50	89		P
Iron			150		14.1	U		0		P
Lead			5.7		1.5	U	6	96		P
Magnesium			26600		36.7	U		0		P
Manganese			46.8		16.5		30	101		P
Nickel			72.8		.7	U	80	91		P
Potassium			3640	B	42.1	U		0		P
Selenium			5		4.4	U	10	50		P
Silver			19.1		.4	U	20	96		P
Sodium			10300		45.4	U		0		P
Thallium			15		2.6	U	20	75		P
Vanadium			101		.8	U	100	101		P
Zinc			61.4		32.6		40	72		P

Comments:

000279A

ADDITION

U.S. EPA - CLP

6

DUPLICATES

EPA SAMPLE NO

SKSWD521008DUP

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No.: Contract:

Matrix: (soil / water) Water SAS No.: SDG No.:

Level: (low / med)

% Solids for Sample: % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight) ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	-	177	B	187	B	5		P
Antimony	-	3.7	U	3.7	U	0		P
Arsenic	-	2.9	U	2.9	U	0		P
Barium	-	37	B	37.8	B	2		P
Beryllium	-	.1	U	.1	U	0		P
Cadmium	-	.2	U	.2	U	0		P
Calcium	0 - 20	121000		120000		.8		P
Chromium	-	1	B	1.1	B	10		P
Cobalt	-	.4	U	.4	U	0		P
Copper	-	14.8	B	12.8	B	14		P
Iron	0 - 100	155		161		6		P
Lead	-	1.5	U	1.5	U	0		P
Magnesium	0 - 20	26600		27000		1		P
Manganese	0 - 15	16.5		17		.5		P
Mercury	-	.1	U	.1	U	0		AV
Nickel	-	.7	U	.7	U	0		P
Potassium	-	3560	B	3510	B	1		P
Selenium	-	4.4	U	4.4	U	0		P
Silver	-	.4	U	.4	U	0		P
Sodium	0 - 5000	10300		10100		200		P
Thallium	-	2.6	U	2.6	U	0		P
Vanadium	-	.8	U	.8	U	0		P
Zinc	0 - 20	32.6		25.4		7.2		P

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LABORATORY CONTROL SAMPLE

Lab Name: PROJ AAH GCAL Contract: _____

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Solid LCS Source: _____

Aqueous LCS Source: 106-40-1 ~310006 HIGH PURITY~323

Analyte	Aqueous (ug/L) True	Found	% R	Solid (mg/kg) True	Found	C	% R
Aluminum	2000	2150	108				
Antimony	500	563	113				
Arsenic	2000	2230	112				
Barium	2000	2080	104				
Beryllium	50.0	55.6	111				
Cadmium	50.0	51.8	104				
Calcium	10000	11100	111				
Chromium	200	210	105				
Cobalt	500	513	103				
Copper	250	279	111				
Iron	1000	1060	106				
Lead	500	533	107				
Magnesium	10000	10700	107				
Manganese	500	536	107				
Nickel	500	525	105				
Potassium	10000	11800	118				
Selenium	2000	2180	109				
Silver	50.0	53.4	107				
Sodium	10000	11300	113				
Thallium	2000	2130	106				
Vanadium	500	536	107				
Zinc	500	514	103				

000282

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

SKSWD521008SD

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No. _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

Level: (low / med) _____

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	177	B	129	U	27.1		P
Antimony	3.7	U	18.5	U			P
Arsenic	2.9	U	14.5	U			P
Barium	37.0	B	37.1	B	.3		P
Beryllium	0.1	U	0.5	U			P
Cadmium	0.2	U	1.0	U			P
Calcium	121000		125000		3.3		P
Chromium	1.0	B	4.0	U	300		P
Cobalt	0.4	U	2.0	U			P
Copper	14.8	B	6.0	U	59.5	E	P
Iron	155		93.1	B	39.9	E	P
Lead	1.5	U	7.5	U			P
Magnesium	26600		28600		7.5		P
Manganese	16.5		15.3	B	7.3		P
Nickel	0.7	U	3.5	U			P
Potassium	3560	B	3650	B	2.5		P
Selenium	4.4	U	22.0	U			P
Silver	0.4	U	2.0	U			P
Sodium	10300		9660	B	6.2		P
Thallium	2.6	U	13.0	U			P
Vanadium	0.8	U	8.3	B			P
Zinc	32.6		3.0	U	90.8	E	P

10/13/05 mrc

000284

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

SKSWD521008SD

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No. _____ Contract: _____

Matrix: (soil / water) Water SAS No.: _____ SDG No.: _____

Level: (low / med) _____

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminium	177	B	129	U	27.1		P
Antimony	37.0	U	18.5	U			P
Arsenic	29.0	U	14.5	U			P
Barium	37.0	B	37.1	B	.3		P
Beryllium	1.0	U	0.5	U			P
Cadmium	2.0	U	1.0	U			P
Calcium	121000		125000		3.3		P
Chromium	1.0	B	4.0	U	300		P
Cobalt	4.0	U	2.0	U			P
Copper	14.8	B	6.0	U	59.5	E	P
Iron	155		93.1	B	39.9	E	P
Lead	15.0	U	7.5	U			P
Magnesium	26600		28600		7.5		P
Manganese	16.5		15.3	B	7.3		P
Nickel	7.0	U	3.5	U			P
Potassium	3560	B	3650	B	2.5		P
Selenium	44.0	U	22.0	U			P
Silver	4.0	U	2.0	U			P
Sodium	10300		9660	B	6.2		P
Thallium	26.0	U	13.0	U			P
Vanadium	8.0	U	8.3	B			P
Zinc	32.6		3.0	U	90.8	E	P

Iolo is mine

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U.S. EPA - CLP

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: PROJ AAH GCAL

Lab Code: LA024 Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: ICP5 Study Date: 04/30/03

Analyte	Wavelength (nm)	Background	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.210		200	25.8	P
Antimony	206.830		60	3.7	P
Arsenic	193.700		10	2.9	P
Barium	233.520		200	.3	P
Beryllium	313.100		5	.1	P
Cadmium	214.430		5	.2	P
Calcium	315.880		5000	7.5	P
Chromium	267.710		10	.8	P
Cobalt	228.610		50	.4	P
Copper	324.750		25	1.2	P
Iron	259.940		100	14.1	P
Lead	220.350		3	1.5	P
Magnesium	279.080		5000	36.7	P
Manganese	257.610		15	.2	P
Nickel	231.600		40	.7	P
Potassium	766.480		5000	42.1	P
Selenium	196.030		5	4.4	P
Silver	328.060		10	.4	P
Sodium	589.580		5000	45.4	P
Thallium	190.800		10	2.6	P
Vanadium	290.880		50	.8	P
Zinc	213.860		20	.6	P

000286

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ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.:

Instrument ID Number: ICP5 Method Type: P

Start Date: 12/19/03 End Date: 12/19/03

				Analyte Symbols																						
EPA Sample No.	D/F	Time	% R	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn
ICV	1	0953			X	X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X	
ICV2	1	1000		X			X													X			X				
ICB	1	1007		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRDL	1	1013			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1	1020		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	1026		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1032		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1039			X																						
CCB	1	1046		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MB136168	1	1053		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSWD521008	1	1100		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSWD521008DUP	1	1107		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSWD521008SD	5	1113		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSWD52DUP1008	1	1120		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSWD521008 (DISSOLVED)	1	1127		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSWD52DUP1008 (DISSOL	1	1134		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCS136169	1	1141		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSWD521008MS	1	1148		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
SKSWD521008PDS	1	1155		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRDL	1	1201			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1	1208		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1	1214		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1	1220		X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1	1227			X																						
CCB	1	1234		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

RESUBMITTED 000294

DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 203111413

PROJECT MANAGER: Ron Rolker

Date: January 15, 2004

Revised Report Dated: October 6, 2005

Data Validator: Mark Kromis

APPENDIX C
LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 203111413.

GCAL #	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-04	SKSW511008 DUP
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008
203111413-08	SKSW511008 (DISS)
203111413-09	SKSW511008 MS (DISS)
203111413-10	SKSW511008 DUP (DISS)
203111413-11	SKSWFB1008 (DISS)
203111413-12	SKSW521008 (DISS)
203111413-13	SKSW531008 (DISS)

INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Calibration
   A. Initial Calibration (IC)
   B. Continuing Calibration (CC)
3. Blanks
4. Inductively Coupled Plasma (ICP) Interference Check Sample
5. Laboratory Control Sample (LCS)
6. Duplicate Analysis
7. Spike Sample Analysis
8. ICP Serial Dilution
9. System Performance
10. Documentation
11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. DUPLICATE ANALYSIS

The Relative Percent Difference (RPD) between the sample and duplicate results were within the acceptance criteria for all target compounds.

7. SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSW511008 and SKSW511008 (Dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total and dissolved fractions with the exception of Selenium (0%).

As per the National Functional Guidelines: if the percent recovery is less than 10% then qualify detected results for that analyte with "J" and non-detected results with "R".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The percent differences were within the acceptance criteria for all target analytes in the total and dissolved fractions.

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

GCAL qualified the dissolved metal results for Zinc with (*) on the Form 1's to indicate that the RPD between the original results and its duplicate result exceeded the control limit. The RPD was actually within the control limit therefore the data validator crossed out the (*) with a single line and dated and initialed the bottom of the report.

GCAL qualified the total and dissolved metal results for Manganese with an "E" qualifier on the Form 1's to indicate that the %Difference (%D) between the original results and its serial dilution result exceeded the control limit. The %Differences were actually within the control limit therefore the data validator crossed out the (E) with a single line and dated and initialed the bottom of the report.

11. OVERALL ASSESSMENT

Calcium and Vanadium were detected in the Field Blank analyzed for total metals at a concentration of 14.1 (B) ppb and 2.9 (B) ppb respectively. Barium, Calcium, Copper, and Vanadium were detected in the Field Blank (Dissolved) at a concentration of 0.3 (B) ppb, 58.4 (B) ppb, 1.6 (B) ppb, and 2.4 (B) ppb respectively. It should be noted that the laboratory supplied the water used for the Field Blank. The results that are greater than the IDL but less than the CRDL are flagged with a ("B") qualifier by the laboratory.

The percent recoveries for Zinc in the Contract Required Detection Limit (CRDL) standards were 70%, 70%, 70%, and 71%.

The percent recoveries for Selenium in the Contract Required Detection Limit (CRDL) standards were 86%, 118%, 110%, 139%, and 164%. The Selenium results were previously qualified under Section 7-titled "Spike Sample Analysis".

If the CRDL is greater than 120% then detected results greater than the IDL but less than two times the CRDL are qualified as estimated with "J". If the CRDL is below 80% then detected results are qualified as estimated with "J" and the non-detected results were qualified with "UJ".

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL #	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   A. IC
   B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV2. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 11/26/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes with the exception of 4-Chloroaniline. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of Naphthalene (30.1%), 2,4-Dinitrophenol (34.8%), Diethylphthalate (35.1%), Di-n-butylphthalate (47.4%), Di-n-octylphthalate (37.3%), and Caprolactam (35.8%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 8.4%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for Naphthalene and Caprolactam and the %RSD were recalculated. The recalculated %RSD was 28.1% and 9.0%, which are within the acceptance criteria of less than 30%. Naphthalene and Caprolactam results greater than 160 ppb were qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

Two CCs dated 11/26/03 and 12/1/03 were analyzed in support of the semivolatile sample analyses reported in the data submissions.

The RRF's for the CC dated 11/26/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 11/26/03 were within the acceptance criteria with the exception the %D for 2,4-Dintrophenol, Di-n-butylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

The RRF's for the CC dated 12/1/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 12/1/03 were within the acceptance criteria with the exception the %D for Naphthalene, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Di-n-butylphthalate, and Di-n-octylphthalate.

As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

4. BLANKS

One laboratory semivolatile method blank and one field blank were analyzed with this SDG. The results are summarized below.

Method Blank (MB 131004)

Di-n-butyl phthalate (0.731 ppb) was detected in the method blank extracted on 11/18/03. The results for Di-n-butyl phthalate less than 7.31 ppb were qualified with "U" for samples extracted with method blank 131004.

Bis (2-Ethylhexyl) phthalate (0.331 J ppb) was also detected in the method blank extracted on 11/18/03. The results for bis (2-Ethylhexyl) phthalate less than 3.31 ppb were qualified with "U" for samples extracted with method blank 131004.

Field Blank (SKSW00FB1008)

The presence of Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate detected in the field blank was mitigated because Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate were detected in the associated method blank.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol in the MS and 4-Nitrophenol and 2,4-Dinitrotoluene in the MSD. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses.

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low-level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction/analysis of the groundwater samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate was mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL #	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit.

However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   A. IC
   B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Laboratory Control Sample
8. Internal Standards Performance
9. Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. System Performance
12. Documentation
13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. Two bromofluorobenzene (BFB) tunes were run. The BFB tunes were acceptable.

3. CALIBRATION

A. Initial Calibration

Two ICs dated 11/17/03 and 11/18/03 were analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes.

The RRF's and the average RRF for the IC dated 11/17/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The RRF's and the average RRF for the IC dated 11/18/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

B. Continuing Calibration

Two CC's dated 11/17/03 and 11/18/03 were analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. The Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

Two laboratory volatile method blanks, a storage blank, a Trip Blank, and a Field Blank were analyzed with this SDG. The results are summarized below.

Method Blanks

1117V2BLK01 (11/17/03)

Methylene chloride was detected at a concentration of 0.14 ppb in the method blank analyzed on 11/17/03.

1118V2BLK01 (11/18/03)

There was no target analytes detected in the method blank analyzed on 11/18/03.

Storage Blank (VHBLK01)

There was no target analytes detected in the storage blank.

Trip Blank (SKGWTB1008)

Sulfur dioxide was detected at a concentration of 311 ppb in the Trip Blank dated 11/13/03.

Field Blank (SKSWFB1008)

Benzene (0.18 ppb), Ethylbenzene (0.063 ppb), Carbon disulfide (0.34 ppb) Methylene chloride (1.5 ppb), Toluene (0.82 ppb), and Xylenes (0.38 ppb) were detected in the Field Blank collected on 11/13/03. The Methylene chloride detected in the Field Blank collected on 11/13/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Field Blank at a concentration of 20.5 ppb.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was submitted for MS/MSD analysis. The percent recoveries and RDP between the MS/MSD were within the acceptance limits. A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

Two LCS were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. DOCUMENTATION

The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers. It should be noted that the field blank contained detectable quantities of petroleum related analytes although the constituents were not detected in any of the associated surface water samples, therefore no action was taken.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 203111413 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL #	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3. IC
4. Calibration Verification
5. Blanks
6. Surrogate Spikes
7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
8. Pesticide Cleanup Checks
9. Target Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 130964

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 11/18/03.

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of gamma-BHC. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. *National Functional Guidelines for Inorganic Data Review.*

US EPA, 1999. *National Functional Guidelines for Organic Data Review.*

GC AL

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7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

Lab use only	Client Name	Client #	Workorder #	Due Date
	Earth Tech	4342	203121507	12-29-03

Report to:
Client: Earth Tech
Address: 200 Vine Street
Wilkes Ky 41076
Contact: Pat Higgins
Phone: 859 442 2300
Fax: 859 442 2311

Bill to:
Client:
Address: Same
Contact:
Phone:
Fax:

P.O. Number: 54830.01
Project Name/Number: Stone Landfill
Sampled By:

Analytical Requests & Method: Semi Volatiles | Total Metals | Dissolved Metals | Total Cyanide | Dissolved Cyanide

Lab use only:
Custody Seal used ☑ yes ☐ no
in tact ☑ yes ☐ no
Temperature °C 2

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	Remarks:	Lab ID
W	12/11	13.52		X	SW (comp) SK-52 1028		17	(Diss) Hold to take 05	12/15 -01
W	12/11	1505		X	SK-52 1008 Dup.			7(+1) and 04 table 5 (tal) of the final DEM plus ten listed analytes	-02
								Standard TAT	

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	Don Pinel	12-13-03	1100
Relinquished by: (Signature) Don Pinel	Received by: (Signature) Cobler	Date: 12-13-03	Time: 1215
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note: Fed Ex # 842595305321

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix[1]: W = water, S = soil, SD = solid, L = liquid, SL = sludge, O = oil, OT = other, WI = wipe, A = air bag

123000

DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 203121507

PROJECT MANAGER: Ron Rolker

Original Dated: February 2, 2004

Revised Report May 6, 2004

Second Revision Dated: October 10, 2005

Data Validator: Mark Kromis

APPENDIX C
LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203121507 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 203121507.

GCAL #	Sample Description
203121507-01	SKSWD521008
203121507-02	SKSWD52DUP1008
203121507-05	SKSWD521008 DISS
203121507-06	SKSWD52DUP1008 DISS

INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Calibration
   A. Initial Calibration (IC)
   B. Continuing Calibration (CC)
3. Blanks
4. Inductively Coupled Plasma (ICP) Interference Check Sample
5. Laboratory Control Sample (LCS)
6. Duplicate Analysis
7. Spike Sample Analysis
8. ICP Serial Dilution
9. System Performance
10. Documentation
11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. DUPLICATE ANALYSIS

The Relative Percent Difference (RPD) between the sample and duplicate results were within the acceptance criteria for all target compounds.

7. SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSWD521008 for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total and dissolved fractions with the exception of Mercury (47%). As per the National Functional Guidelines: if the percent recovery is greater than 30% and less than 74% qualify detected results for that analyte with "J" and non-detected results with "UJ".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects.

The percent differences were within the acceptance criteria for all target analytes with the exception of Zinc. As per the National Functional Guidelines if the percent difference criteria is not met qualify the associated results with "J".

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

GCAL qualified the total metal results for Copper and Iron with an "E" qualifier on the Form IX to indicate that the %Difference (%D) between the original results and its serial dilution result exceeded the control limit. The %Differences were actually within the control limit therefore the data validator crossed out the (E) with a single line and dated and initialed the bottom of the report.

11. OVERALL ASSESSMENT

The percent recoveries for Zinc in the Contract Required Detection Limit (CRDL) standards were 78%, and 73%. The detected Zinc results were qualified with a "J" and the non-detected Lead results were qualified with "UJ".

The percent recoveries for Selenium in the Contract Required Detection Limit (CRDL) standards were 128%, and 84%. The detected Selenium results were qualified with a "J".

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203121507 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 203121507.

GCAL #	Sample Description
203121507-01	SKSWD521008
203121507-02	SKSWD52DUP1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   A. IC
   B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV2. One decafluorotriphenylphosphine (DFTPP) tune was run representing the shift in which the standards and samples were analyzed. The DFTPP tune is acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 12/24/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes. The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of 2,4,6-Trichlorophenol (31.0%), 2,4-Dinitrophenol (32.2%), and Diethylphthalate (41.0%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 15.1%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for 2,4,6-Trichlorophenol and the %RSD was recalculated. The recalculated %RSD was 7.2%, which is within the acceptance criteria of less than 30%. The 2,4,6-Trichlorophenol results greater than 160 ppb will be qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

One CC dated 12/24/03 was analyzed in support of the semivolatile sample analyses reported in the data submissions. The RRF's for the CC dated 12/24/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC were within the acceptance criteria.

4. BLANKS

One laboratory semivolatile method blank was analyzed with this SDG. The results are summarized below.

Method Blank (MB136362)

Di-n-butyl phthalate (1.8 ppb) was detected in the method blank extracted on 12/16/03. The results for Di-n-butyl phthalate less than 18 ppb were qualified with "U" for samples extracted with method blank 136362. Bis (2-Ethylhexyl) phthalate (0.956 J ppb) was also detected in the method blank extracted on 12/16/03. The results for bis (2-Ethylhexyl) phthalate less than 9.56 ppb were qualified with "U" for samples extracted with method blank 136632.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)

There were no samples submitted for MS/MSD analysis during this sampling event.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses.

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low-level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction/analysis of the surface water samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate was mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203121507 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203121507.

GCAL #	Sample Description
203121507-01	SKSWD521008
203121507-02	SKSWD52DUP1008
203121507-03	SKSWD52FB1008
203121507-04	SKSWD52TB1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
   A. IC
   B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Laboratory Control Sample
8. Internal Standards Performance
9. Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. System Performance
12. Documentation
13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. One bromofluorobenzene (BFB) tune was run. The BFB tune was acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 12/16/03 was analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes. The RRF's and the average RRF for the IC dated 12/16/03 were within the acceptance criteria specified in the method for all target analytes with the exception of trans-1,2-Dichloroethene, Acetone, and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R). The analyte 1,2-Dichloroethene as reported by GCAL consists of the summation of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene. The RRF for cis-1,2-Dichloroethene were within the acceptance criteria therefore the data validator qualified the total 1,2-Dichloroethene result with "UJ" instead of rejecting the result.

B. Continuing Calibration

One CC dated 12/16/03 was analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions. The percent difference (%D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of trans-1,2-Dichloroethene, Acetone and 2-Butanone. The trans-1,2-Dichloroethene, Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

One laboratory volatile method blank, storage blank, Trip Blank, and a Field Blank were analyzed with this SDG. The results are summarized below.

Method Blank

MB136071 (12/16/03)

Chloroform was detected at a concentration of 0.57 ppb in the method blank analyzed on 12/16/03.

Storage Blank (VHBLK01)

Chlorobenzene (0.63 ppb) and Acetone (1.9 ppb) were detected in the storage blank analyzed on 12/16/03

Trip Blank (SKSWD52TB1008)

There were no target analytes detected in the Trip Blank dated 12/11/03.

Field Blank (SKSWD52FB1008)

Acetone (16 ppb), Benzene (0.11 ppb), Methylene chloride (30 ppb), and Styrene (0.63 ppb) were detected in the Field Blank collected on 12/11/03.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

A LCS/LCS duplicate were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. DOCUMENTATION

The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 203121507 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203121507.

GCAL #	Sample Description
203121507-01	SKSWD521008
203121507-02	SKSWD52DUP1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3. IC
4. Calibration Verification
5. Blanks
6. Surrogate Spikes
7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
8. Pesticide Cleanup Checks
9. Target Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. Documentation
12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. There were no target analyte detected in the associated samples therefore data qualification was not warranted.

The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20% with the exception of 4,4'-DDT (21.6%). As per the National Functional Guidelines up to two single component target pesticides (other than the surrogates) per column may exceed the 20.0 percent limit but the %RSD must be less than or equal to 30.0 percent.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 136076

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 12/16/03.

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

There were no samples submitted for MS/MSD analysis during this sampling event.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. *National Functional Guidelines for Inorganic Data Review.*

US EPA, 1999. *National Functional Guidelines for Organic Data Review.*